DOCUMENT RESUME

ED 456 414 CS 014 443

AUTHOR Lowe, Kristine; Nelson, Amy L.; O'Donnell, Katie; Walker, Megan C.

TITLE Improving Reading Skills.
PUB DATE 2001-05-00
NOTE 91p.; Master of Arts Action Research Project, Saint Xavier University and SkyLight Professional Development Field-Based Master's Program.
PUB TYPE Dissertations/Theses (040)
EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS Action Research; Critical Thinking; Elementary Education; Grade 1; Grade 4; *Instructional Effectiveness; Kindergarten; Listening Skills; Multiple Intelligences; Parent Attitudes; *Reading Achievement; *Reading Improvement; *Reading Instruction; *Reading Skills; Student Attitudes; Writing Achievement
IDENTIFIERS *Phonemic Awareness

ABSTRACT

This report describes a program for improving pre-reading and reading skills. Some students of the targeted kindergarten, first, and fourth grade classes typically exhibited poor reading development due to personal, social, and educational problems. The documents that supported this evidence were observational checklists, parent surveys, pretests, and posttests. Analysis of the probable causes in the targeted kindergarten and first grade classes indicated poor language development, lack of preschool experience, limited parental involvement, unidentified learning disabilities, and health and nutrition problems. The fourth grade students of the targeted school showed lack of critical thinking, comprehension, and vocabulary. A review of solution strategies suggested from knowledgeable others, combined with an analysis of the problem setting, resulted in the selection of three major categories of intervention: concentrated units of study with emphasis on phonemic awareness; multiple intelligences through daily lessons; and Breakthrough to Literacy, an interactive literacy program. Post intervention data indicated improvement in pre-reading and reading skills, listening skills, and writing ability. An increased interest in books and reading was also developed. (Contains 26 references and 12 figures of data. Appendixes contain a phonemic awareness pre/posttest; checklists; the parent survey [pre and post]; a student survey; a consent form; and a book list.) (RS)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 456 414

IMPROVING READING SKILLS

Kristine Lowe
Amy L. Nelson
Katie O'Donnell
Megan C. Walker

An Action Research Project Submitted to the Graduate Faculty of the

School of Education in Partial Fulfillment of the

Requirements for the Degree of Master of Arts in Teaching and Leadership

Saint Xavier University & SkyLight Professional Development

Field-Based Masters Program

Chicago, Illinois

CS 014 443

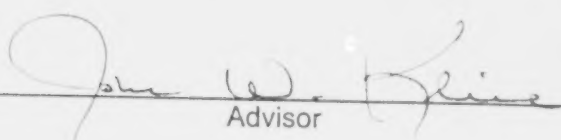
U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
K. Lowe, A.L. Nelson, K. O'Donnell, M.C. Walker
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

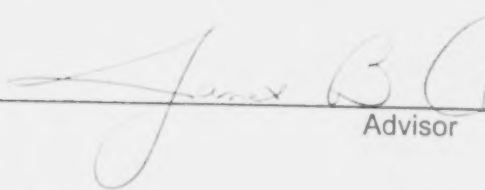
BEST COPY AVAILABLE

SIGNATURE PAGE

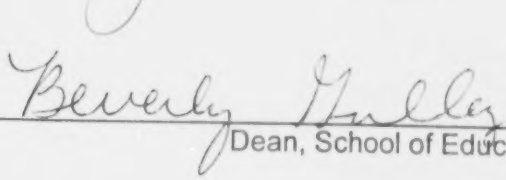
This Project was approved by



Advisor



Advisor



Dean, School of Education

ABSTRACT

This report will describe a program for improving pre-reading and reading skills. Some students of the targeted kindergarten, first, and fourth grade classes typically exhibited poor reading development due to personal, social, and educational problems. The documents that supported this evidence were observational checklists, parent surveys, pretests, and posttests.

Analysis of the probable causes in the targeted kindergarten and first grade classes will indicate poor language development, lack of preschool experience, limited parental involvement, unidentified learning disabilities, and health, nutrition problems. The fourth grade students of the targeted school showed lack of critical thinking, comprehension, and vocabulary.

A review of solution strategies suggested from knowledgeable others, combined with an analysis of the problem setting, resulted in the selection of three major categories of intervention: concentrated units of study with emphasis on phonemic awareness, multiple intelligences through daily lessons, and Breakthrough To Literacy, an interactive literacy program.

Post intervention data indicated improvement in pre-reading and reading skills, listening skills, and writing ability. An increased interest in books and reading was also developed.

TABLE OF CONTENTS

CHAPTER 1 – PROBLEM STATEMENT AND CONTEXT 1

General Statement of the Problem 1

Immediate Problem Context 1

The Surrounding Community 5

National Context of the Problem 9

CHAPTER 2 – PROBLEM DOCUMENTATION 11

Problem Evidence 11

Probable Causes 22

CHAPTER 3 – THE SOLUTION STRATEGY 27

Literature Review 27

Project Objectives and Processes 32

Project Action Plan 33

Methods of Assessment 37

CHAPTER 4 – PROJECT RESULTS 38

Historical Description of the Intervention 38

Presentation and Analysis of Results 42

Conclusions and Recommendations 44

REFERENCES 62

APPENDICES 64

CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

The students of the targeted kindergarten, first, and fourth grades have limited pre-reading and reading skills, which lead to problems in all subject areas. If a student enters school with pre-reading deficiencies, the deficiencies usually widen each year. The tools used to indicate below grade level reading skills are the Illinois Standards Achievement Test (ISAT) scores, classroom assessments, and teacher observations.

Immediate Problem Context

Site A

Site A is a primary school with grades kindergarten through fourth, which operates from August to June. The Title I school is located in the south side of an inner city. Its neighborhood consists of a city park, swimming pool, churches, a private elementary school, small businesses, and homes.

The enrollment is 446 with a racial and ethnic background of 70.2% Black, 26.9% White, and 2.9% Hispanic. The student body is 91.3% low-income and 1.6% limited English (School Report Card, 1998-1999). The neighborhood is influenced by an increase in crime, unemployment, and drug related incidents (Urban Education Grant, 1999). Low-income students are from families receiving public aid. Some students live in

institutions for neglected or delinquent children. Other students are supported in foster homes with public funds and are eligible to receive free or reduced-price lunches (Urban Education Grant, 1999). The school has 62% mobility. The attendance rate is 92.4% with a chronic truancy rate of 5.4% (School Report Card, 1998-1999).

The school has had six different principals in seven years. Administrative changes have occurred through retirement, death, incarceration, and job transfers. Staff, student body, and the community are affected by frequent changes of policies and lack of continuity in the leadership.

The school staff consists of a principal, a lead teacher, twenty-six certified grade level teachers, two certified resource teachers, a certified art teacher, a certified music teacher, a certified gym teacher, a speech pathologist, a library manager, a computer teacher, an orchestra teacher and a writing teacher. The site has two non-certified assistants, three personal attendants, a home school facilitator, a Project Target truancy officer, two secretaries, and two custodians. The staff's racial and ethnic background is 80.5% White, 17.4% Black, and 2.1% Hispanic.

Site A was built in 1890 with additions added in 1960 and 1977. The school houses four kindergarten classrooms, five first grade classrooms, four second grade classrooms, three third grade classrooms, three fourth grade classrooms, four special education classrooms servicing first through fourth, one resource classroom, and one speech classroom. There is a health clinic, which is affiliated with a local hospital. Its staff consists of a nurse practitioner, a nurse, and a social worker. The school has a library, computer lab, gymnasium, and a cafeteria with a staff of seven who provide breakfast and lunch daily.

Site A provides a variety of programs. Accelerated Reader is a reading comprehension program that is assessed by the computer according to reading levels. Prime math is a program that utilizes manipulatives for higher-level thinking skills in grades kindergarten through fourth. Lightspan is an after school computer reading program. Fourth grade students are involved in a Service Learning Grant, which provides senior citizens mentors. The school also provides orchestra, Girl Scouts, 4-H, dance, and after school tutoring. The school does not have a committed parent club organization.

The Support team (S-team) is a group of teachers and counselors who provide suggestions for referred students with academic and behavioral problems. The alternative classroom environment (ACE room) provides an alternative placement for consistently disruptive students. A home- school facilitator and a certified teacher maintain this room and provide instruction, counseling and home support.

Classroom A is a full day kindergarten classroom for five, six and seven year olds. The room is located in the older part of the building next to the health clinic and the school's main office. It is across the hall from the gym and near the front entrance to the school. The walls of the rectangular room are lined with bulletin boards and chalkboards. The room has two windows, a bathroom, and is equipped with three computer stations. There are five hexagonal tables, which accommodate groups of six students. The furniture, which is old and sturdy, is arranged in centers. This allows the classroom to be divided into separate workspaces. The centers are labeled going clockwise around the room as math manipulatives, housekeeping, sand table, art, easel painting, cubbies, blocks, computers, games and puzzles, listening, library, and science. The science center houses the class pets. Printing and writing materials are supplied in each center. The

block center also doubles as the class meeting area. The rug in this area is brightly striped and divided into squares. The students sit on individual squares during group activities.

Classroom B is a full day kindergarten room for five, six and seven year olds. The room is located on the first floor of the school across from the library. The large room has windows, a bathroom, bulletin boards, and chalkboards. There are four computer stations. Four hexagonal tables accommodate groups of six students. Art decorations hang from the ceiling and are changed monthly. There is a rug area where students sit during group lessons.

In the kindergarten curriculum for Classrooms A and B, a major emphasis is placed on developing social skills through cooperative activities and learning centers which are interwoven through the entire program. The curriculum consists of language, reading, math, and developing fine and large motor skills. There is no required time allocated for each subject area at the kindergarten level.

Classroom C has a Title I resource teacher who travels to five different first grade classes daily. Approximately one hour is spent in each classroom. The required time allocated for each subject in first grade is 690 minutes per week for reading/library/spelling, 300 minutes per week for penmanship/English/composition, 60 minutes per week for social studies, 250 minutes per week for arithmetic, 60 minutes per week for science/health, 45 minutes per week for music, 45 minutes per week for art, 240 minutes per week for physical education/recess, and 110 minutes per week for optional subjects.

The Surrounding Community

According to the 1990 Census of Population and Housing, there is a total population of 2,785 in the neighborhood. Of this population, 915 are enrolled in school pre-primary through college. The educational attainment of the 1,459 persons 25 years of age and older is shown as 52.6% having a high school degree, and 2.5% having a bachelor's degree or higher. The neighborhood surrounding the school is known for many crimes including robbery, drugs, alcohol abuse, and prostitution. The crime situation may contribute to the school's high mobility rate. Site A has the highest mobility rate of any primary school in the district.

Immediate Problem Context

Site B

Site B is a primary school with grades kindergarten through fourth, which operates from August to June. The school in located in the center of the city in a middle class neighborhood. The neighborhood consists of businesses and homes, as well as a large hospital. The school is adjacent to one of the most traveled streets in the city. The enrollment is 418 with a racial and ethnic background of 76.7% White, 21.1% Black, and 1.1% Hispanic. The school's mobility rate is 15.1% and attendance is 95.5%. The student body is 33.6% low income (School Report Card, 1998-1999).

School B provides programs such as After School Reading, Accelerated Reader, Science in a Baggie, Book in a Baggie, orchestra, and drama. The school's staff consists of a principal, twenty-six certified grade level teachers, a certified music teacher, a certified art teacher, a certified gym teacher, a speech pathologist, and a library manager. There are no resource teachers on staff because full-inclusion classrooms are team taught

by regular division and special education instructors. The site also has non-certified assistants, personal attendants, a secretary, and two custodians. The staff's racial and ethnic background is 100% white.

Site B was built in 1840 by pioneers. It grew from a one-room school in 1931 to an overcrowded two-room school housing over one hundred students. A new school was built in 1944. An addition was completed in 1951. The east wing, consisting of eight classrooms, was developed in 1958. The last eighth grade class graduated in 1986. Since the opening of school in August 1986, Site B has been a primary school with kindergarten through fourth grade. Currently, the school contains four kindergarten classrooms, five first grade classrooms, four second grade classrooms, four third grade classrooms, and four fourth grade classrooms. The school has one speech classroom and two self-contained classrooms for students with special needs.

Classroom D is a fourth grade classroom for nine and ten year olds. The room is located on the third floor of the building's main wing. Bulletin boards, posters, and a chalkboard line the room's walls. New desks and chairs are arranged in groups of four or five where the students work in teams. The carpeted reading corner is a popular place for sustained silent reading time. There are a number of plants that promote a home-like atmosphere within the reading corner. Centers with educational games and books continue to encourage learning. The required time allocation for each subject in fourth grade is 600 minutes per week for reading/library/spelling, 350 minutes per week for penmanship/English/composition, 80 minutes per week for social studies, 300 minutes per week for arithmetic, 80 minutes per week for science/health, 45 minutes per week for

music, 45 minutes per week for art, 240 minutes per week for physical education/recess, and 60 minutes per week for optional subjects.

The Surrounding Community

According to the 1990 Census of Population and Housing, the total population for the neighborhood is 4,166. Of this population, 896 are enrolled in school, pre-primary through college. The educational attainment of the 3,058 persons 25 years of age and older is shown as 87.7% high school graduates and 33.4% with bachelor`s degree or higher.

District

Sites A and B operate with an elected school board of seven members. Each member is elected to a four-year term. The board hires a superintendent of schools, four assistant superintendents, and one comptroller/treasurer. The board has the final vote for the hiring of all other employees as well. The average salary for administrators is $67,628. The average salary for teachers is $40,082. The operating expenses per pupil for the district is $6,953. Of the 15,258 pupils in the district 58.1% are from low-income families. The racial and ethnic background of the pupils is Black 53.9%, White 42.2%, Hispanic 2.1%, Asian 1.7%, and Native American 0.1%. The mobility rate in the district is 33 %. The chronic truancy rate is 7%, and the attendance rate is 92%. There are four high schools, twelve middle schools, fourteen primary schools, one gifted school, one magnet school, and one early childhood center. The Edison Project operates two of the primary schools. The district has adopted the Harcourt Signatures Integrated Language Arts series for grades kindergarten through sixth (School Report Card, 1998-1999).

The Community

The city is in the Midwest with a population of 111,400. It is considered a blue-collar town and has been voted an "All American City" three times. The racial and ethnic background is 65,400 White, 27,700 Black, 4,800 Hispanic, and 3,500 Asian/Pacific Islands (Economic Development Council, 1999-2000). The city is located in the center of the state beside a major waterway and has major transportation arteries to larger cities. A private college with an enrollment of 5,813 is in the city. A junior college with an enrollment of 12,500 is in close proximity to the city. The median family income is $48,100. The unemployment rate for the city is 3.3%. The city's top employers are in manufacturing, health care, and education. The city has recently begun to diversify with InfoTech industries. Parks and recreation areas cover 12,000 acres of city land. In the downtown area, there is a civic center that has a 12,000 seat arena, 2,000 seat theater, and 65,000 square foot exhibition hall. The community supports a ballet company, civic opera, symphony orchestra, theater groups, and a public library system. It also has a museum and a planetarium. A college basketball team, minor league baseball team, professional indoor football team, and a professional hockey team provide a variety of spectator sports in town. The city is a home rule city using the council-manager form of government. A mayor is elected to serve as an at-large member of the city council. The council is comprised of five district representatives and five at-large members.

National Context of the Problem

The problem of students having limited pre-reading and reading skills is a national problem. International Reading Association (IRA) officials implore decision makers to take a more comprehensive approach to formulating solid literacy programs. "Literacy is a basic human right," said Carol M. Santa, president of the IRA. "We must honor children's rights to an excellent reading background." (Manzo, 2000 p.1)

" Test results indicate that a quarter of the nation's 4th graders can't read proficiently, more than a dozen states have set aside money for teaching basic skills," (Manzo, 2000 p.1). The Reading Association states that children have a right to early reading instruction based on individual needs, instruction that builds skills and desire to read, and teachers who are well prepared with skills that are up to date. The children also have a right to a variety of reading materials in the school that consider their first language, technology, and classrooms that are safe and have appropriate student-teacher ratios, certified teachers, and student discipline. (Manzo, 2000 p.1)

Reading is essential to success in our society. The ability to read is highly valued and important for social and economic advancement. The National Researcher Council is concerned with the large numbers of children in America whose educational careers are hindered because they do not read well enough to ensure understanding and to meet the demands of an increasingly competitive economy (Burns, Griffin, & Snow, 1999).

The importance of this problem led the U.S. Department of Education and the U.S. Department of Health and Human Services to ask the National Academy of Sciences to establish a committee to examine the prevention of reading difficulties. In 1998, the committee was charged with conducting a study of the effectiveness of interventions for

young children who are at risk of having problems learning to read. Their goals were to comprehend a rich but diverse research base and to translate the research findings into advice and guidance for parents, educators, publishers, and others involved in the care and instruction of the young. It was hoped to convey this advice to the targeted audiences through a variety of publications, conferences, and other outreach activities. As a result, the committee published a report entitled *Preventing Reading Difficulties in Young Children* (Burns, Griffin, & Snow, 1999).

According to Elizabeth Segel, Ph.D., infants and toddlers who could one day become struggling students can be helped with grassroots literacy partnerships. Segel's article talks about the importance of reading skills and habits of literacy. With encouragement, coaching, and appropriate books, low-income parents can provide a good reading start for their children. A nonprofit organization called Beginning with Books uses necessary resources such as attractive, free, high-quality books, library cards, and support from teacher-facilitators and community volunteers. Adult literacy has a great effect on the start of reading for children. Building eagerness to read is necessary for all: teachers, parents, and volunteers. The difference between a child who can read and one who does not read is significant to lifelong learning. (Segel, 2000).

CHAPTER 2

PROBLEM DOCUMENTATION

Problem Evidence

Site A

Classroom A

The evidence to document pre-reading skills in Classroom A was collected through a school district designed phonemic awareness assessment, a stages of writing development checklist, and a parent survey. These assessments were given to twenty-two students over a two-week period.

Children's ability to manipulate oral language is an indicator of reading readiness. The school district has designed a phonemic awareness test for this assessment (Appendix A). A summary for Classroom A is in Figure 1.

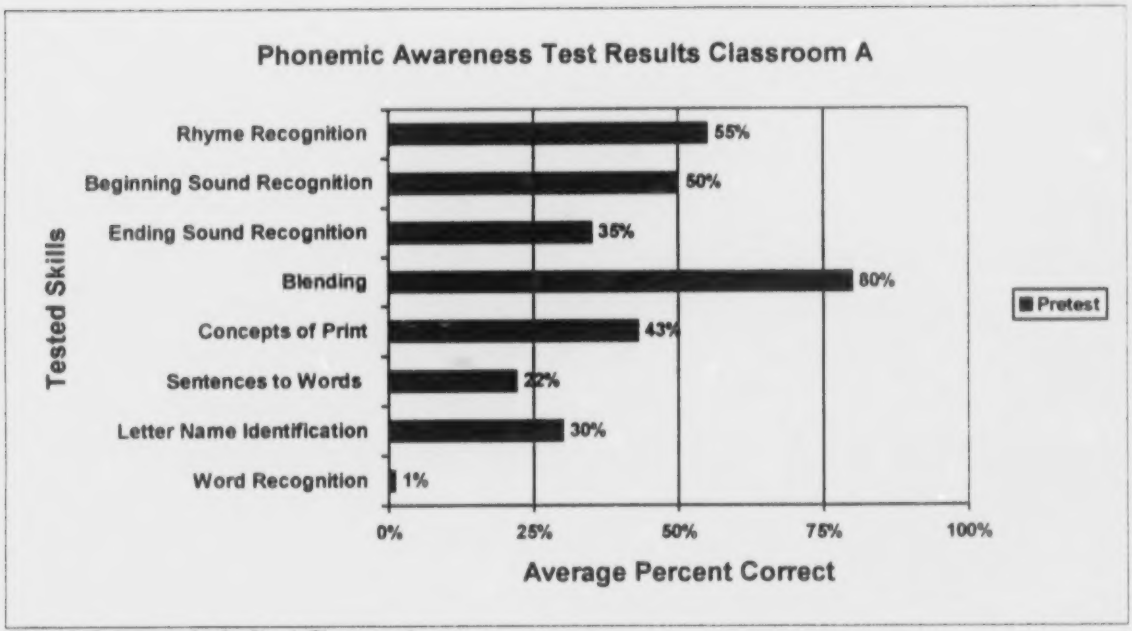


Figure 1: Pretest results for Site A Classroom A

This oral test is given one on one to kindergarteners. The test has eight sections and is administered as a pretest and posttest. Their ability to identify rhyming words is assessed in the rhyme recognition section. Classroom A scored 55% correctly, which was the highest score. This could indicate the students have had some exposure to nursery rhymes prior to kindergarten.

The beginning and ending sound sections assess a student's capability of isolating sounds in a spoken word. Classroom A answered 50% of items correctly on beginning sounds, which is higher then they received on ending sounds. On ending sounds Classroom A answered 35% of the items correctly. This is not surprising since identifying the beginning sound of a word is easier and occurs before identifying the ending sound.

Classroom A answered 43% of the items correctly on concepts of print. This section appraised a student's awareness of print directionality and their ability to differentiate

between a number, a shape, a letter, a word and a sentence. The low score is a concern because children learn about print by having books read to them.

Word recognition received the lowest score. Classroom A answered 1% of the items correctly. This section required the students to read a list of kindergarten level sight words and five consonant, vowel, consonant (cvc) words. The low score is not surprising since the pretest was administered at the beginning of the kindergarten school year.

To document the close relationship between reading and writing, the stages of writing checklist was completed (Appendix B). A summary for Classroom A is in Figure 2.

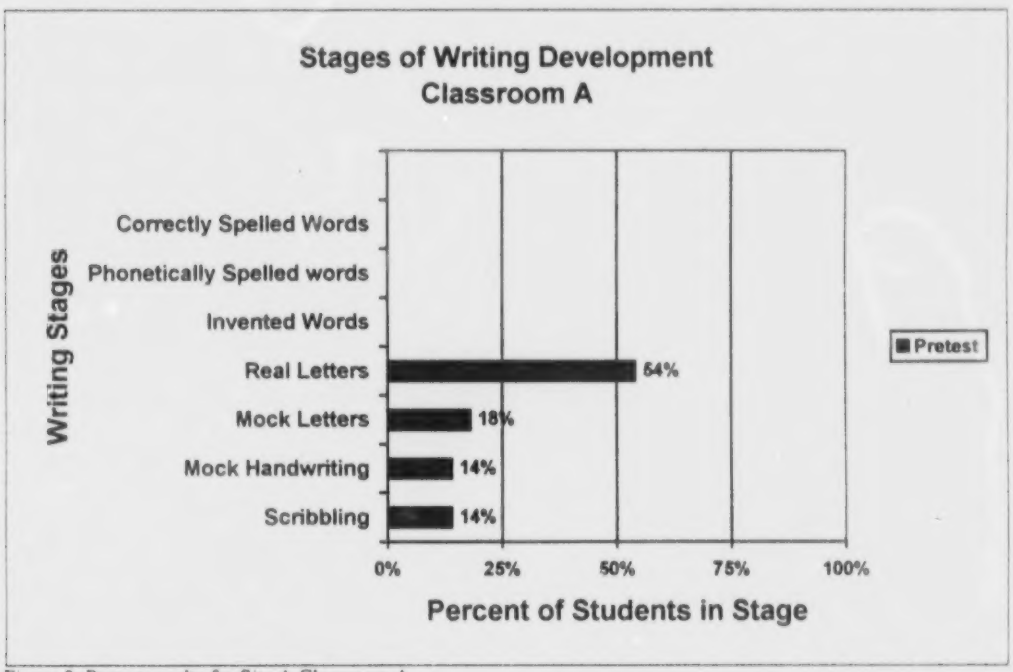


Figure 2. Pretest results for Site A Classroom A

Through classroom observation and writing samples from journals, the checklist was completed. The checklist has seven sections that describe the developmental levels of writing and is used as a pre-assessment and post-assessment. Forty-six percent of the students in Classroom A are in the beginning stages of writing which consist of scribbling, mock handwriting, and mock letters. Fifty-four percent of the students are

writing real letters. The letters are not phonetically representations of words, but reflect a student's familiarity with the alphabet.

A parent survey was sent home with each child in Classroom A (Appendix C). Eighty-two percent of the surveys were returned. The survey asked the parents how much time they spend reading to their child daily. Two parents responded that they spent five minutes each day reading to their child. Seven parents responded that they read to their child ten minutes each day. Nine parents responded that they read to their child fifteen minutes or more each day. All of the parents responded that books are available at home, and they discussed the books with their child. Seventeen parents indicated their child looks at the pictures in a book and can tell a story. All but one parent said that writing materials are available to their child, and they all said their child pretends to write. These responses indicate the students in Classroom A are read to at home, and they have experiences with writing at home. The last question asked was if their child attended preschool. Sixteen parents responded their child did attend preschool. Four parents said their child did not attend preschool. It is unclear if the parents understood what preschool meant because one of the parents who responded with the answer of no had their child in a pre-kindergarten class at Site A the previous year.

Site A

Classroom B

The evidence collected to document the pre-reading skills in Classroom B was a school district phonemic awareness assessment, a stages of writing development checklist, and a parent survey. The assessments were given to a class of 18 students over a two-week period.

A phonemic awareness assessment (Appendix A) created by the district was given to all kindergarteners throughout the district. A summary for Classroom B is given in Figure 3.

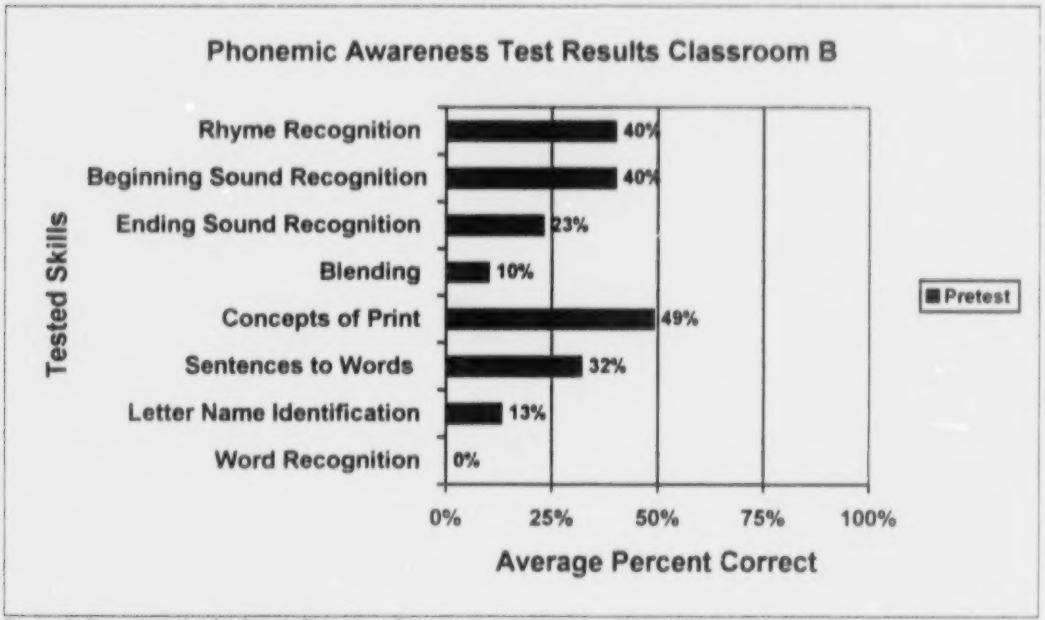


Figure 3: Pretest results for Site A Classroom B

The district designed phonemic awareness test is given orally to kindergartners on a one to one basis. There are eight sections to the test. Classroom B answered 40% of the items correctly on rhyme recognition. Rhyme is a prominent feature of speech. It is also a way of categorizing the words young children hear. For beginning kindergartners a child can tell whether two words rhyme, be able to generate a rhyme for a simple word, or be easily taught to do these tasks. Children who score low are likely to experience difficulties acquiring early reading skills.

The students also answered 40% of the items correctly on beginning sound recognition. One of the earliest signs of children's awareness of phonemes or individual speech sounds is their understanding that words begin or end with the same sound. The

association between sounds and letters is an important part of reading. The students answered 10% correctly on the blending section. These percentages show that the students enter school with very little exposure hearing and using rhymes and reading readiness skills.

The students answered 49% of the items correctly on the concepts of print section. This section asks children to discriminate between numbers, shapes, letters, words, and sentences. The students answered 13% of the items correctly on the letter identification section, and 0% correctly on the word recognition section. These percentages show the students have had very little exposure to books in general.

To document the correlation between reading and writing, a stages of writing checklist (Appendix B) was completed. Figure 4 summarizes these results.

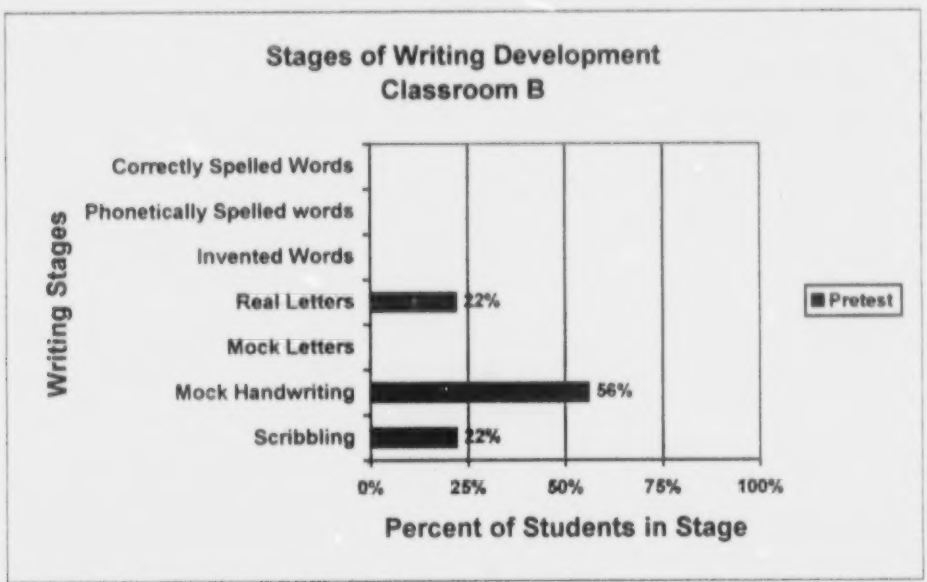


Figure 4: Pretest results for Site A Classroom B

Through classroom observation and writing samples from journals, a developmental checklist was completed. Seven stages of writing are used in the checklist and given as a pretest and a posttest assessment. The pretest assessment showed that 56% of the students

are in mock handwriting. Mock handwriting is when the child makes wavy lines or continuous scribbles across the page. Twenty-two percent of the students are in the real letters stage. In this stage mock letters are more similar to real letters. They usually learn to make letters in their name first. This assessment also indicates 78% of the students in Classroom B are in the earliest stages of writing. It also indicates the students have had little or no writing experience at home, which could be attributed to the lack of supplies and parental involvement at home.

A parent survey (Appendix C) was given to the students to take home. Fifteen of the eighteen surveys were returned. Eleven of the fifteen responded that they read to their child fifteen minutes or more per day. The remaining four responded ten minutes per day. All fifteen said they have books and writing materials available to their child at home. All of the parents talk to their children about the stories and let their child tell stories by looking at the pictures in the books. All but one child attended some sort of preschool.

Site A

Classroom C

The evidence to document students' phonemic awareness and causes for the lack of phonemic awareness was collected with a school district designed test, a parent survey, and an informal student survey. The assessments were given over a two-week period, starting the second week of school. Classroom C is a group of students that is considered at risk in reading by the classroom teacher. The students came from five different first grade classrooms at Site A. These twenty-nine students were given the district-developed phonemic awareness test (Appendix A) that usually is given as a pre/post test to kindergarten students. Teacher researchers' predictions were verified by pretest results.

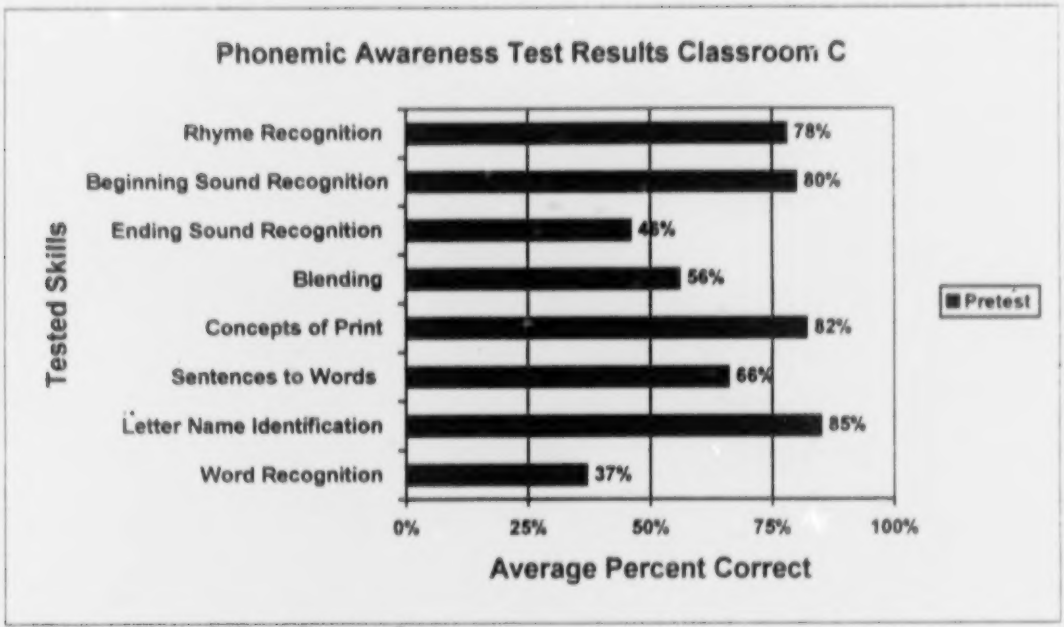


Figure5: Pretest results for Site A Classroom C

The results are summarized in Figure 5.

Classroom C students scored 78% correct on rhyme recognition. This is a great concern regarding first grade at-risk students because sensitivity to the sound structure of words is a necessary condition for learning to read. On the test there are five pairs of words said orally. The student must decide if they rhyme or not. Three individual words are then given and the students must think of a word to rhyme with each. The class averaged 80% of beginning sounds and only 46% of ending sounds. Research shows that the ability to judge whether words have the same first sounds is a critical first step in the development of phonemic awareness. This test assesses this ability by asking the students to listen to two words. They must decide if the two words have the same beginning sound. In the next part one word is given and they must decide which of the next two words has the same beginning sound, as the first word. Listening for ending sounds is tested in the same way. With a score of only 56% on ability to blend words, it

is difficult for these students to keep up with first grade reading skills. Blending requires the student to hear the sounds of each phoneme and be able to put them together to make a word. Research has demonstrated that this task is highly correlated to other tasks on phonemic awareness. It is also a good predictor of reading achievement (Hoien, Lunder, Sanovich, & Bjaalid, 1995). First grade students should score 100% with knowing concepts of print. Tested students understood 82% of the concept of print skills. Testing for concept of print determines if a child knows the difference between a number, shape, letter, word, sentences, where to start reading and left to right and return sweep. Knowing that sentences are made up of words showed a score of 66% correct for the twenty-nine students. Eighty-five percent was the average score for letter identification. The students were tested on fifteen words that had been taught in kindergarten and several consonant vowel consonant words with a result of 37%.

Researchers indicate that home environment has a huge impact on phonemic awareness and reading readiness in young children. A parent survey (Appendix D) was administered to twenty-nine parents with 100% returned. This survey was an attempt to document information about the home environment. Of the twenty-nine students, twenty-three attended some kind of pre-school program. Most parents said that they spend between ten and fifteen minutes per day reading to their child, and the child sits close to them while they read. Only one parent reported that he never read to his child. Almost all said they teach their child to say rhymes or songs, and the same results were given about parents hearing the child sing and recite rhymes while at play. Three children were reported unable to follow a two-step direction. Of the twenty-nine homes, two reported they do not have any kind of books available for their children to read. Most relied on the

school library for books to come into the home. Parents reported they occasionally read a book, magazine, or newspaper for pleasure. Ten parents of the twenty-nine said they read something daily.

The students of Classroom C were given an oral survey (Appendix E) concerning their reading habits. Of the twenty-nine students, seven said they did not attend pre-school. Two students said they never read books at home and do not have books at home. In contrast to the parent survey, nine students reported that no adults read to them daily at home. The parent survey only reported one adult did not read to his or her child daily. One child never had heard of the nursery rhyme "Itsy Bitsy Spider" or "Jack and Jill."

Site B

Classroom D

A parent survey was given to the students to take home (Appendix F). After being completed by their parent(s), it was returned to school and collected. Of the twenty surveys sent home, 90% were returned. This survey reinforced the idea of limited parental involvement. The first question showed 39% of the parents do not read to their child each day. Question two asked if the parent talks to their child about the story and its meaning. The responses were a contradiction to the first question. The parents responded that 94% of them do discuss what they read to their children. However, it would be difficult to discuss reading material if it was not read to the child since the children do not read independently. Parents may have answered this way because they do discuss what they read to their child. This activity may not occur daily though. The parents were asked how often they take their child to the library. One half of the parents responded with once a year or never. This does not include the children using their school library. The

question specifically addressed how often a parent independently takes their child to the public library. The parents showed that utilizing the library was not a personal priority. However, all of the parents answered, "yes" to having reading materials available for their child at home. Parents then listed the types of reading materials read most often to least often. Books, magazines, and then newspaper were the most common answers.

A student survey was handed out in class, then completed by the students and collected (Appendix G). Since this survey was done in class, 100% were returned and recorded. The student survey began with a simple question, "Do you like to read?" Only two of the twenty students answered, "No". With 90% of the students expressing an interest in reading, optimism was present. Although the students expressed liking to read, the time-spent reading was lacking. Students were asked how many minutes they spend reading on their own each day. The majority, 55%, reported they only read between five and fifteen minutes. When asked about the frequency of visiting a library, the students' responses were almost identical to those of the parents. Therefore, 50% of the students as well as the parents responded "never" or "once a year". The focus of the survey was to assess the emphasis placed on reading in the students' households. The student survey also confirms the need for parental involvement and an emphasis on reading.

The Signatures End-of-Selection Tests (Appendix H) are an ongoing assessment tool for making instructional decisions. The Signatures Tests were designed to measure students' reading comprehension of the main selections featured in the student's anthologies. A summary for Classroom D is in Figure 6.

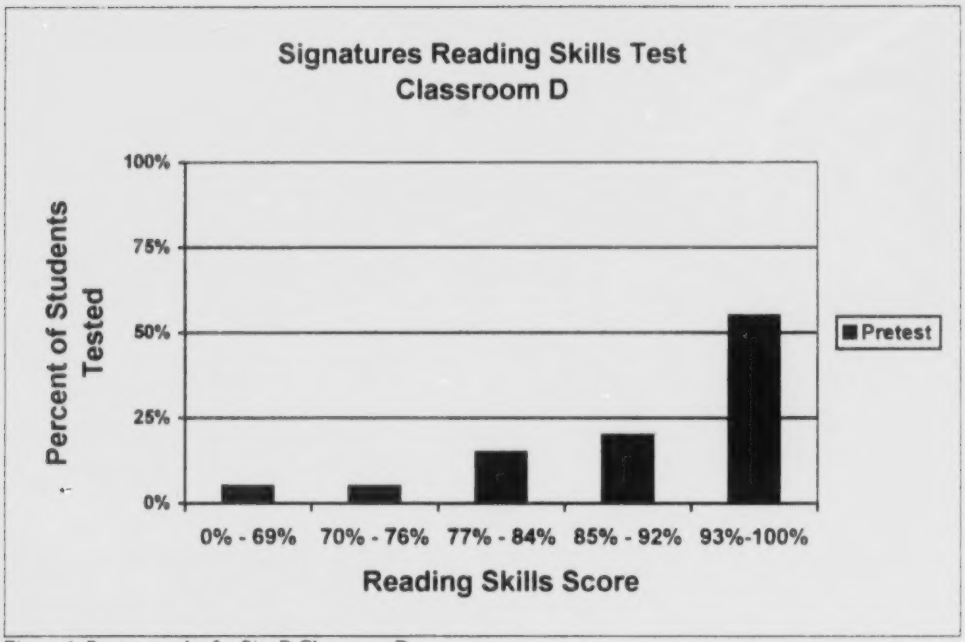


Figure 6: Pretest results for Site B Classroom D

Each test consists of literal-level questions that assess recognition and recall selection content and key vocabulary words. The format includes multiple-choice questions and response items requiring the students to write words, phrases, and sentences. The reading test given shows 55% of the students scored between 93-100%. Results also exhibit 20% of the class scoring between 85-92%. Of the twenty students participating, five or 25% show their scores were 84% or lower. With one-fourth of the students in this class having low test scores, improvement is needed. This is the group of children whose reading skills are lacking. Their needs for support at home and even at school are possibly not being met.

Probable Causes

Nearly all parents are concerned that their children do well in school, and data suggest a strong correlation between parental involvement and children's achievement.

However, more and more children now come from single parent families or families where both parents work, which can make parental involvement more difficult (Mayer, 2000).

All too often we see students coming from an illiterate family or one with low reading ability. These families do not have a lot of books, but the children are curious about them and their parents want to try to read them (Przygoda, 1998). It is important to further literacy and to spark an interest in reading. Once a person is hooked on reading as a child, they will read forever (Przygoda, 1998).

Researchers have documented that when early intervention and attention does not occur, then personal, social, and educational problems arise. During the first three years of schooling, children learn the foundations of reading. They put together the written symbols for oral language , which they have been hearing since birth. By the fourth year, students use reading for higher-order thinking skills. If their skills are not fully developed, they will not succeed in the other subjects taught. Most students never catch up with their peers once they have fallen behind. Most non-readers have not developed the ability to recognize phonemes. The child falls further behind, becomes frustrated, and there is a much higher dropout rate. This is referred to as the Matthew Effect (Reading: The First Chapter in Education). Without this skill it makes it hard to decode and read even single words (Reading: The First Chapter in Education).

Facts recently discovered by neurologists and psychologists have proven that children develop and learn depends on genetics and nurture. Poverty adversely affects the environment and experiences children have. It also has a negative impact on nutrition of the expectant mother and child. Children in poverty are more prone to developmental

delays and learning disabilities. Epidemiological surveys confirm that the risk of poor school readiness and reading problems are highest among families of the lowest socio-economic status (Read with Me, 1997, Sept.).

In a 1994 test of fourth grade reading, part of the National Assessment of Educational Progress, 43 % of the inner-city schoolchildren scored at or above a basic level compared with 63 % elsewhere and 58 % as a whole. In urban schools where more than half the children are poor, 23 % scored at or above basic level (AP, 1998).

Currently, the average American child or adolescent spends between 21 and 28 hours per week viewing television. This figure does not include time spent watching movies, listening to music or watching music videos, playing video or computer games, or surfing the Internet for recreational purposes (Hogan, Beard, & Corrigan, 1999). Time spent with media often displaces involvement with creative, active, or social pursuits. Television is omnipresent in most children's worlds. Ninety-nine percent of American households own a television, and the average family has two or more sets (Vessey, Yim-Chiplis, & MacKenzie 1998). The time spent viewing television could otherwise be spent in active play with others, community activities, studying, reading, or thinking (Derksen & Strasberger, 1994).

Success in reading can be predicted before school. Three predictors are (1) preschoolers' ability to name letters of the alphabet, (2) their general knowledge about text (which is the front of the book and which is the back, whether the story is told by the pictures or the print, and which way to turn the pages of a book); and (3) their awareness of phonemes (the speech sounds that correspond roughly to individual letters). A child's level of phonemic awareness upon entering school is widely held to be the strongest

single indicator of the success that she or he will experience in learning to read, or the likelihood that she or he will fail (Adams 1990: Stanovich, 1986).

A study conducted by Connie Juel of the Department of Curriculum and Instruction at the University of Texas states, "A high percentage of children who remain poor readers had entered first grade with little phonemic awareness" (Educational Research Network, 1997-1998). Phonemic blending is a prerequisite to reading, and the ability to do this must be developed early. Economically disadvantaged minority students have little phonemic awareness of standard English used in the classroom (Educational Research Network, 1997-1998). This is a result of the differences between the language used at home and at school. Poor readers read dramatically fewer words, which provide them fewer opportunities to develop vocabulary, concepts, and ideas from their reading. This affects the development of the spelling and writing skills (Educational Research Network, 1997-1998).

The most common cause of difficulties in acquiring early word reading skills is weakness in the ability to process the phonological features of language (Liberman, Shankweiler, & Liberman, 1989). This has been one of the most important discoveries about reading difficulties in the last twenty years. Phonemic awareness can be defined simply as the ability to identify, think about, or manipulate the individual sounds in words. This ability has shown to be related to the growth of early word reading skills (Lundberg, Frost, & Peterson, 1988; Wagner, et al., 1997). Confidence in being able to identify children at risk for reading failure before reading instruction begins depends on the use of phonemic awareness tests.

Discovery of the core phonological problems associated with specific reading disability has had at least one unanticipated benefit. The ability to assess these core language problems directly has led to the discovery that the early word reading difficulties of children, with relatively low general intelligence and verbal ability are associated with the same factors (weakness in phonological processing). These interfere with early reading growth in children who have general intelligence in the normal range (Fletcher, et al., 1994; Share & Stanovich, 1995; Stanovich & Siegel, 1994).

Knowing that so many children lack phonemic awareness and that phonemic awareness is critical to learning to read and write alphabetic script, we begin to see the importance of making a place for its instruction. In fact, research clearly shows that phonemic awareness can be developed through instruction and, furthermore, that doing so significantly accelerates children's subsequent reading and writing achievement (Ball & Blachman, 1991; Blachman, Ball, Black, & Tangel, 1994; Bradley & Bryant, 1983; Byrne & Fielding-Barnsley, 1991, 1993, 1995; Castle, Riach, & Nicholson, 1994; Cunningham, 1990; Lundberg et al., 1988; Wallach & Wallach, 1979; Williams, 1980).

Phonics is an important element in early reading development, but a good program involves more than phonics (Farstrup, 2000). Phonics alone, without other strategies, cannot produce successful readers. Children bring a great diversity of individual needs and circumstances to today's classrooms. They need comprehensive reading instruction from teachers who are allowed and encouraged to receive on-going training in reading. A good comprehensive reading program includes all aspects of the reading process (Farstrup, 2000). This includes alphabetic principles, comprehension strategies, and encouraging the love of reading itself.

CHAPTER 3

THE SOLUTION STRATEGY

Literature Review

In 1997, Congress asked the Director of the National Institute of Child Health and Human Development, in consultation with the Secretary of Education, to convene a national panel to assess the status of research-based knowledge. Effectiveness of various approaches to teaching children to read was also included in this study (National Readers Panel, Feb. 1999). After much debate and discussion the following topics were chosen for study: alphabetics including phonemic awareness instruction and phonics instruction, fluency, comprehension including vocabulary instruction, text comprehension instruction, teacher preparation and comprehension strategies instruction, teacher education and reading instruction, computer technology and reading instruction (National Readers Panel, Feb. 1999).

The findings from the panel showed that teaching phonemic awareness to children improves their reading. Phonemic awareness provides students with foundational knowledge in the alphabetic system and is one of the necessary instructional components within a reading program. Another component in teaching children to read is systematic phonics instruction. For kindergarteners phonics instruction enhances their ability to read and spell words. For first graders, it improves their ability to decode and spell words

while increasing their abilities to comprehend text. Across all grades, phonics instruction improves the ability to spell. Systematic phonics instruction should be part of a reading program with instruction in phonemic awareness, fluency, and comprehension strategies. The panel also concluded that computer technology can be a successful component of a reading program (National Readers Panel, Feb. 1999).

Research has identified phonemic awareness as the most potent predictor of success in learning to read. Phonemic awareness is more highly related to reading than tests of general intelligence, reading readiness, and listening comprehension (Stanovich, 1993-9; Stanovich, Cunningham & Cramer, 1984; Adams, 1990; Ehri, 1992).

Before children can make any sense of the alphabetic principle, they must understand that the sounds derived from the letters are identical to the sounds of speech. Research shows that the idea of spoken language being comprised of sequences of little sounds does not come naturally or easily to human beings. The problem is that people do not attend to the sounds of phonemes as they produce or listen to speech. Instead, they process the phonemes automatically, directing their active attention to the meaning and the utterance as a whole. The challenge, therefore, is to find ways to get children to notice the phonemes, to discover their existence and separability. Fortunately, many of the activities involving rhyme, rhythm, listening, and sounds that have long been enjoyed with preschool-age children are ideally suited for this purpose (Adams, 1990).

Knowing so many children lack phonemic awareness and that phonemic awareness is critical to learning to read and write an alphabetic script, we begin to see the importance of making a place for its instruction. In fact, research clearly shows phonemic awareness can be developed through instruction, and furthermore, it significantly accelerates

subsequent reading and writing achievement (Foorman, Francis, Beeler, Winikaates, & Fletcher, 1997; Foorman, Francis, Shaywitz, Shaywitz, & Fletcher, 1997). This ability to analyze words into sounds is exactly the skill, which promotes successful reading in first grade (Wagner, Torgesen, & Fletcher, 1997; Ball & Blachman, 1991; Blachman, Ball, Black, & Tangel, 1994; Riach, & Nicholson, 1994; Cunningham, 1990).

Teachers need to be aware of instructional activities that can help their students become aware of phonemes before they receive formal reading instruction, and they need to realize how phonemic awareness will become more sophisticated as students' reading skills develop. Engaging preschool, kindergarten, and first grade children in brief, daily oral activities which emphasize the sounds of language, may go a long way in helping them become successful readers and learners (Lyon, 1998). Children at risk, because of economical or cultural disadvantages, may require more training in phonemic awareness (Educational Research Network, 1997-1998). Reducing the impact of poverty will require instruction sensitive to children's own knowledge and background, while consistently supporting children as individual learners.

Instruction using the following types of phonemic awareness tasks has had a positive effect on reading acquisition and spelling for nonreaders: rhyming, auditory discriminating sounds that are different, blending spoken sounds into words, word-to-word matching, and isolating sounds in words (Ball & Blachman, 1991; Byrne & Fielding-Barnsley, 1995; Cunningham, 1990; Foorman, Francis, Beeler, Winikates, & Fletcher, in press; Lie, 1991). It is very important to read aloud to children and allow time for discussion. Reading aloud to children helps to develop oral language, cognitive

skills, and concepts of print and phonemic awareness. It also broadens background knowledge and improves vocabulary (Burns, Griffen, & Snow, 1999).

It is crucial for teachers to be allowed to learn more about literacy acquisition. As teachers expand their knowledge, they will be better equipped to select appropriate teaching strategies, interventions, and materials to ensure they are meeting the diverse needs of children (Burns, Griffen, & Snow, 1999).

Explicit instruction in how segmentation and blending are involved in the reading process was superior to instruction that did not explicitly teach the children to apply phonemic awareness to reading (Cunningham, 1990). Kindergarten children with explicit instruction in phonemic awareness did better than a group of first graders who had no instruction, indicating that this crucial preskill for reading can be taught at least by age five and is not developmental (Cunningham, 1990).

In 1983, Harvard professor Dr. Howard Gardner first published his theory of multiple intelligences in his book, *Frames of Mind.* Gardner derived this theory from extensive brain research, which included interviews, tests, and research on hundreds of individuals. In this book, he outlined seven intelligences, but has since then added another intelligence (Nicholson-Nelson, 1998). Verbal-Linguistic Intelligence involves having a mastery of language. This intelligence includes the ability to effectively manipulate language in expressing oneself rhetorically or poetically. It also allows one to use language as a means to remember information. Mathematical-Logical Intelligence consists of the ability to detect patterns, reason deductively, and think logically. This intelligence is most often associated with scientific and mathematical thinking. Spatial Intelligence gives the ability to manipulate and create mental images in order to solve

problems. This intelligence is not limited to visual domains. Gardner notes that spatial intelligence is also formed in blind children. Spatial Intelligence includes the ability to transfer visual-spatial representations mentally or concretely. Musical Intelligence encompasses the capability to recognize and compose musical pitches, tones, and rhythms (Brualdi, 1998). Responsiveness to the emotional implication of these elements of music is also part of this intelligence. Auditory functions are needed for a person to develop this intelligence in relation to pitch and tone, but it is not needed for the knowledge of rhythm. Bodily-Kinesthetic Intelligence involves using one's body to solve problems, make things, and convey ideas and emotions. It is the ability to use one's mental abilities to coordinate one's own bodily movements. This intelligence challenges the popular belief that mental and physical activity is unrelated. Interpersonal Intelligence refers to the ability to work effectively with other people and to understand them and recognize their goals, motivations, and intentions. (Nicholson-Nelson, 1998). Intrapersonal Intelligence entails the ability to understand one's own emotions, feelings, and motivations. These two intelligences are separate from each other. However, they are often linked together because of their close association in most cultures. Naturalist Intelligence is the latest intelligence added by Gardner. It includes the capacity to recognize flora and fauna, to make distinctions in the natural world, and to productively utilize this Naturalist intelligence in activities such as farming and biological science. Gardner points out that the overall trends in neurology and psychology strongly support his view that intelligence comprises many abilities (Brualdi, 1998).

Textbooks offer many strategies that uncover students' greatest strengths and learning styles, while improving literacy skills. There are eight sections. Each section

deals with one of the areas of intelligence identified by Gardner. Each section begins with a discussion of the specific area of intelligence, followed by a series of flexibly designed activities that promote literacy through the use of a particular intelligence. There are also across-the-areas of intelligence activities. The directions are step-by-step, and almost all of the materials used are found in every classroom. Verbal-Linguistic Intelligence provides strategies for: reading for the main idea, reading between the lines, questioning while reading, storytelling, reading for fun, using a reading response journal, and being critical thinkers. The other areas are equally as detailed (Broderick & Raymond, 2000).

The theory of multiple intelligences is discussed as a means of helping students live up to their potential (Coffman, 1999). By incorporating multiple intelligences methods into lesson plans, improvements can be made in students' skills across the curriculum. Employing these strategies will often benefit all the children in the class, not just those whose particular talents and strengths are being addressed that day. Awakening students to the multiple intelligences broadens their understanding and presents them with fresh, innovative problem-solving techniques and insights. Children develop an awareness of their own strengths and interests, while discovering there is not always one way to learn (Nicholson-Nelson, 1999).

Project Objectives and Processes

As a result of increased instructional emphasis on pre-reading and reading skills, during the period of September 2000 to January 2001, the kindergarten, first, and fourth grade students from the targeted classes will increase their reading ability. Appropriate teaching strategies and programs such as phonemic awareness, Breakthrough to Literacy, and multiple intelligences will be utilized. Reading ability will be measured by teacher-

constructed tests, assessments from the Harcourt Signatures Integrated Language Arts series, the Breakthrough to Literacy computer program, checklists, and student journals.

Project Action Plan

Site A

Classroom A & B

Kindergarten

To begin the action research, a parent consent form for students to participate will be sent home along with a parent survey. The parent survey will help to determine the amount of parental involvement. A phonemic awareness pre-test, developed for the district in 1998, will be administered to each student in the targeted class.

Each week a new book from the Breakthrough to Literacy program will be introduced. Large group lesson will be taught daily for approximately twenty minutes. These lessons include phonemic awareness and print awareness. Students will use the Breakthrough computer program for a minimum of fifteen minutes per day. The computer sets the pace for each individual student and provides a detailed progress report. These lessons include basic computer skills, letter recognition, sound-symbol relationship, and vocabulary development. Journal writing will be done weekly coordinated with the book of the week. Three times during this intervention, a writing checklist will be utilized to record growth. Individual copies of the book of the week will be sent home on every Friday for the student to read to their family. In order to assess the effects of the intervention, we will utilize a literacy checklist three times during the intervention. A phonemic awareness posttest will also be administered to each student.

Action Plan

Site A

Classroom C

First Grade

To begin the action research, the parents will be sent a letter with project information and a permission form for their child to participate in the project. A parent survey will also be administered. A phonemic awareness pre-test, developed by the school district in 1998, will be administered to the students.

In the weeks of the action research, components of phonemic awareness will be introduced, practiced, extended, and revisited. Depending on the entry levels and progress of the students, time needed on each activity will be determined. Checklists will help to determine this schedule.

The following lessons will be implemented for thirty minutes three times a week: listening games, rhyming, jingles, poetry, words and sentences, awareness of syllables, initial and final sounds, phonemes, and introducing letters and spellings. Games and books that are most appropriate for the students will be used. Fourteen days of the general sequence of activities is listed below.

Day 1
-listening to sequences of sound
-whispering game
-emphasizing rhyme through movement

Day 2
-poetry, songs, and jingles
-do you remember?
-word rhyming

Day 3
-rhyme stories
-introducing the idea of sentences
-nonsense words

Day 4
-introducing the idea of sentences
-poetry, songs, jingles
-do you remember?

Day 5
-rhyme stories
-can you rhyme?
-introducing the idea of sentences

Day 6
-introducing the idea of a word
-nonsense
-the ship is loaded with...

Day 7
-introducing the idea of a word
-rhyme stories
-action rhymes

Day 8
-hearing words in sentences
-whispering game
-rhyme books

Day 9
-hearing words in a sentence
-rhyme book
-emphasizing rhyme through movement

Day 10
-exercises with short and long words
-words in and out of context
-rhyme stories

Day 11
-exercises with short and long words
-rhyme books
-clapping names

Day 12
-clapping names
-words in and out of context
-take one thing from the box

-Day13
-take one thing from the box
-rhyme stories
-hearing words in sentences

Day 14
-listening first, looking after
-nonsense words
-rhyme book

A post phonemic awareness test will be administered at the end of the intervention, and a parent post survey to determine any gains.

Project Action Plan

Site B

Classroom D

Fourth Grade

The Action Plan for the 16-week intervention will address reading skills using multiple intelligences. The students will have daily reading lessons as well as Sustained Silent Reading (SSR), refers to a special time in our school day that is devoted to continuous silent reading. Most days consist of 30 minute for S.S.R. activities using multiple intelligences and specific reading skills will be applied in this action plan. Assignments from the Signatures reading textbook series will be used for assessment as well as quizzes and tests at the end of stories. A reading center will be incorporated into the reading lessons. Reading Activity Boxes are part of the center. These boxes contain question cards regarding reading skills such as comprehension, critical thinking, context clues, and vocabulary. Books from the classroom's library, school's library, and the

reading series will be used throughout this plan. The students will also be journaling daily. The topics will address reading along with other areas of the curriculum.

Methods of Assessment

In order to assess the effects of the intervention, tests covering skills will be developed. Assignments to assess reading skills will be used. Checklists shall assess phonemic awareness. Quizzes and tests from the Harcourt Signatures Integrated Language Arts series will be applied for assessment of their reading skills and ability. In addition, student journals will be kept throughout the intervention period.

CHAPTER 4

PROJECT RESULTS

Site A

Classroom A and B

Kindergarten

Historical Description of the Intervention

The objective of this project was to increase pre-reading and reading skills in two kindergarten classrooms. The Breakthrough To Literacy (BTL) program was implemented to increase their pre-reading and reading abilities (Wright Group, 1999). Breakthrough To Literacy is an interactive literacy program combining technology, literature, and writing. This program is designed to be part of a balanced literacy classroom.

The first week of the intervention was dedicated to organizing materials and collecting entry data. A parent permission slip was sent home. The students' information, which included name, birthday, gender, language stage, and print experience, was entered into the three computers in each classroom. A colored symbol was assigned to each student. The symbol is easily recognized by the non-reading student to successfully log onto the computer. A nametag, matching the symbol, was filled out and the student's picture was attached to the back. A district designed phonemic awareness pretest (Appendix A) was administered individually to each student. The student journals were made and writing

samples were collected to complete the stages of writing development checklist (Appendix B). Fifty-six big books, with accompanying packages of six pupil books and thirty take-me-home books, were organized and displayed for student access.

The mascot was introduced the second week of the intervention. The mascot was a stuffed toy elephant. The elephant was a helpful icon in the computer software. The students voted on a name for the elephant to form classroom ownership. After voting on a name, the teacher with the help of the mascot introduced the book-of-the week (Appendix J).

Each week, the following daily procedures for the book-of-the-week were implemented throughout the intervention. On Monday, the book was introduced with content clues. The clues and a copy of the book were placed in a bag and taken out one at a time, the last clue being the book. Students made predictions and connected the clues to the book. This helped the students verbalize thoughts and ideas about the story. The book's title, author, and illustrator were identified. Then, the teacher read the book-of-the-week's big copy to the class while pointing to the words and modeling left to right progression. Discussion followed the reading allowing the students to express thoughts and reactions to the story. Then, the take-me-home books were distributed, and the students read a copy while the teacher reread the big book.

On Tuesday, the students, with teacher prompting, reviewed the title, characters, and the story events. Before re-reading the story, the students were allowed opportunities to retell the story in their own words. The take-me-home books were read again, and students were given a variety of tasks to complete. These tasks included identifying the alphabet letter of the week and sight words. Other tasks were counting words in sentences

and identifying punctuation marks. The tasks varied and became more challenging as the intervention progressed.

On Wednesday, vocabulary words were reviewed. Then the teacher asked the students to tell about something in their own lives that reminded them of the story. This allowed the students the opportunity to integrate the story with their past experiences. The story was read together as a group.

On Thursday, the story was read together as a group. Next, the students made up a related story or created a new ending to the story. This was done in large groups or individually. In large groups, the teacher modeled writing on big paper. Individually the students wrote in their journals.

On Friday, the book was read together as a group and the week's activities were summarized. The student's take-me-home books were sent home for them to share with their families. By this time, the students were very familiar with the text. They could read it to their families with confidence.

Throughout the week, the teacher used model writing, structured writing, and guided writing strategies. These strategies provided the students with the conventions of print. The student practiced these strategies in daily journal writing.

Week Two of the intervention began with the teacher introducing the BTL computer software. This software allows students to choose from five different components for a minimum of 15 minutes a day. The five components are "Listen to Stories," "Paint," "Explore the Alphabet," "Explore Words," and "Tell Stories." For this intervention, we used only the first four components because the component entitled "Tell Stories" was to be used during the second semester of kindergarten.

"Listen to Stories" was an activity that allowed the students to choose a book from the fifty-six titles offered. The books were identical to the classroom and take-me-home books. The computer read the book highlighting the words, which allowed the students to follow along. The students could set their own pace by clicking on a word to re-read and clicking on an arrow to turn the page. This component provided an opportunity for the students to listen to a favorite story over and over again. These activities increase vocabulary and provide rich language experiences.

The "Paint" component was used to develop computer mouse skills. The student picked from a variety of colors and clicked on a section to paint a picture. The pictures were illustrations from the BTL books. After each student completed one hour of computer time, the "Paint" component was turned off. It reappeared as students completed lessons in "Explore Words" and "Explore Alphabet" as a reward.

"Explore Alphabet" was an activity that included lessons on matching letters to letter names and letters to sounds. An alphabet assessment automatically occurred every six weeks after the initial assessment.

"Explore Words" was an activity that matches pictures to words or sentences. This activity became more challenging as the students correctly moved through the lessons. The lessons included words in sentences, syllables, onset/rime, and sounds. The student's lesson placement in "Explore Words" was determined by the information the teacher had entered into the computer at the beginning of the program. The computer moves a student to a higher level after the student has successfully completed previous lessons. When a student was not successful, the computer moved them back to the level at which they

were comfortable. The teacher moved students to a higher level when their writing samples reflected needed changes.

At the end of the 16-week intervention a phonemic awareness posttest (Appendix A) was administered. The posttest was given individually to each student. Writing samples from the writing journals were evaluated and the stages of writing checklist (Appendix B) was completed. The kindergarten language and literacy checklist was not used. The checklist was too time consuming to complete and the information would have been identical to the phonemic awareness assessment.

Presentation and Analysis of Results

Classroom A

The phonemic awareness pretest and posttest comparison for Classroom A is in Figure 6. The students' scores went up in the eight categories. The most significant

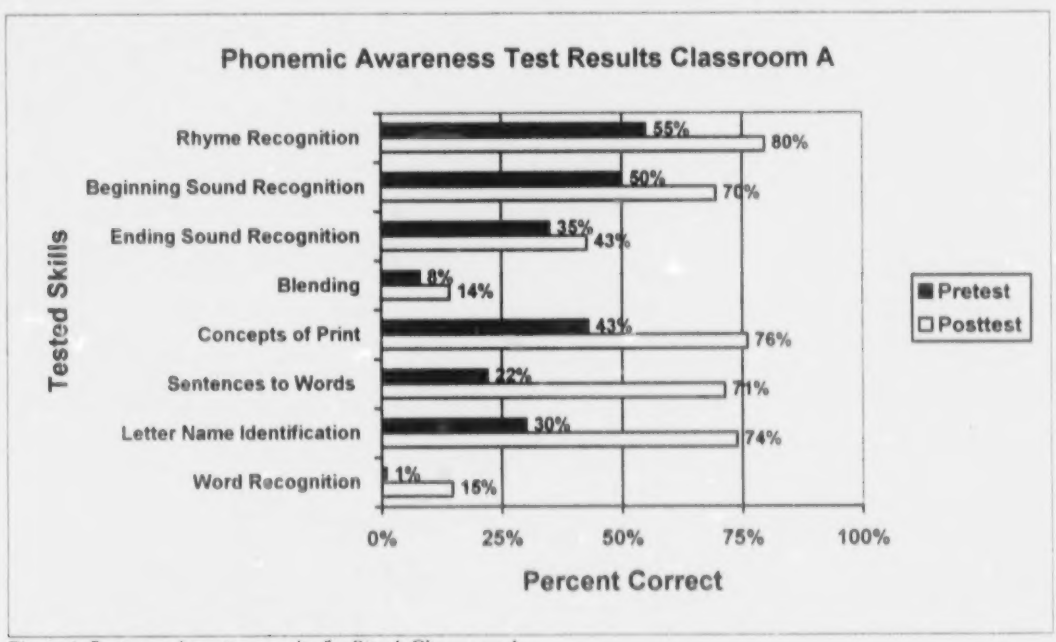


Figure 6. Pretest and posttest results for Site A Classroom A

increase was in sentences to words. This is important because it indicates that the students can hear individual words and have some understanding that words make up sentences.

Their ability to identify alphabet letters by name is an exit goal for kindergarten. This area increased by 44%, which is an appropriate level for midyear kindergarten. The rhyme recognition section increased by 25%. The ability to rhyme is a good indication of early reading skills.

Beginning sounds increased by 20% in contrast to ending sounds, which increased by 8%. This is not surprising since identifying the beginning sound of a word is easier and occurs before identifying the ending sound.

Blending only increased by 6%. This is a concern because being able to isolate individual sounds and blend them back together is a critical pre-reading skill.

Through classroom observation and writing samples from journals, the stage of writing checklist was completed. The pretest and posttest comparisons are in Figure 7.

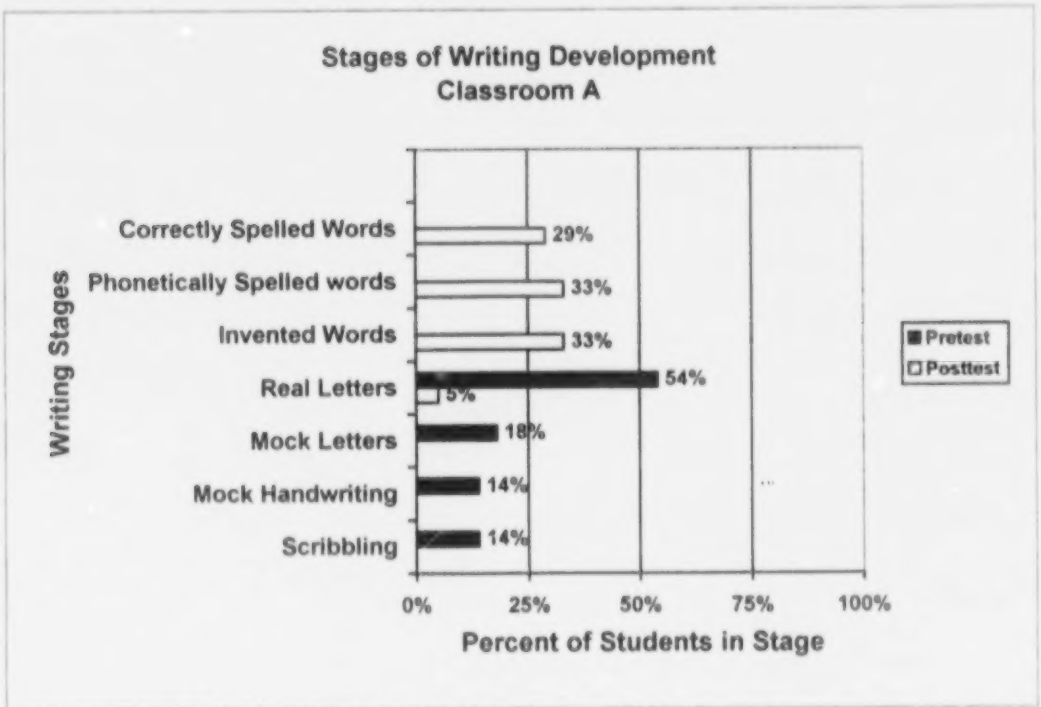


Figure 7. Pretest and Posttest results for Site A Classroom A

All students demonstrated growth in their writing ability. Twenty-nine percent of the students are in the highest stage, which is correctly spelled words. Thirty-three percent of the students are in the phonetically spelled word stage. This indicates that the students are transferring knowledge of beginning and ending sounds to writing. Only five percent of the class, which represents one student, is in the real letter stage. In this stage, students are familiar with the alphabet, but have not yet correlated sounds to letters.

Conclusions and Recommendations

Classroom A began the intervention with twenty-two students and ended with twenty-one students. This completion rate is uncommon considering the high mobility rate for the school. All the students increased their pre-reading and reading skills based on classroom observations and the pre and post assessments.

The BTL program was very exciting for the teacher because it provided numerous choices of literature to choose from and lesson plan ideas to integrate across the curriculum. The students looked forward to the elephant mascot introducing a new book each week. This kept them engaged in the daily take-me-home book activities and eager to find the book on the computer to read. The students eagerly waited their turn at the computer daily, often asking to return two or three times. The lessons on the computer reflected remarkable growth in the daily journal writing. Many students advanced five or six stages in their writing development during the 16-week intervention.

The parents of the students in Classroom A were impressed with the BTL program. At parent conferences they shared that their children had saved all of the take-me-home books and often read them to the family. At the end of the intervention each student had a library consisting of 15 books. By the end of the school year, this library will have grown to over thirty titles.

The second year of teaching the BTL program promises to be more exciting than the first year. The teacher will be more experienced and confident with the computer software. There are numerous reports that the computer can generate for the teacher's use. The intervention did not provide enough time to pursue each report. These reports would assist a teacher in proper student placement in the "Explore Words" software component. The teacher will also be familiar with the 56 book titles and be better prepared to make curriculum decisions about the order in which the books are introduced. The Breakthrough To Literacy program was a success in developing pre-reading and reading skills for Classroom A.

Presentation and Analysis of Results

Classroom B

The phonemic awareness pretest and posttest comparison for Classroom B is in Figure 8. Growth occurred in all areas. The most significant increase is letter name identification. This area went up by 64%, which indicates they are on target for the exit goals for kindergarten.

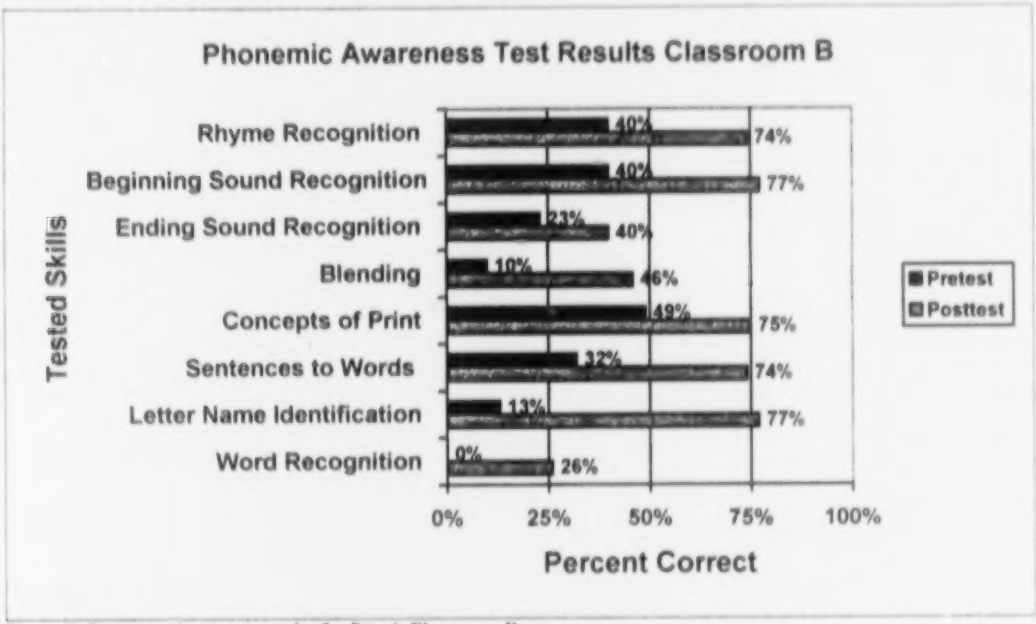


Figure 8: Pretest and posttest results for Site A Classroom B

Sentences to words increased by 42%. This is important because being able discriminate a word in a sentence is a critical component for reading. Another critical component is the ability to rhyme. This area increased by 34%.

Beginning sound and ending sound recognition both increased. Beginning sounds increased by a higher percentage because this is an easier decoding skill to master.

Through classroom observation and writing samples from journals, the stage of writing checklist was completed. The pretest and posttest comparisons are in Figure 9.

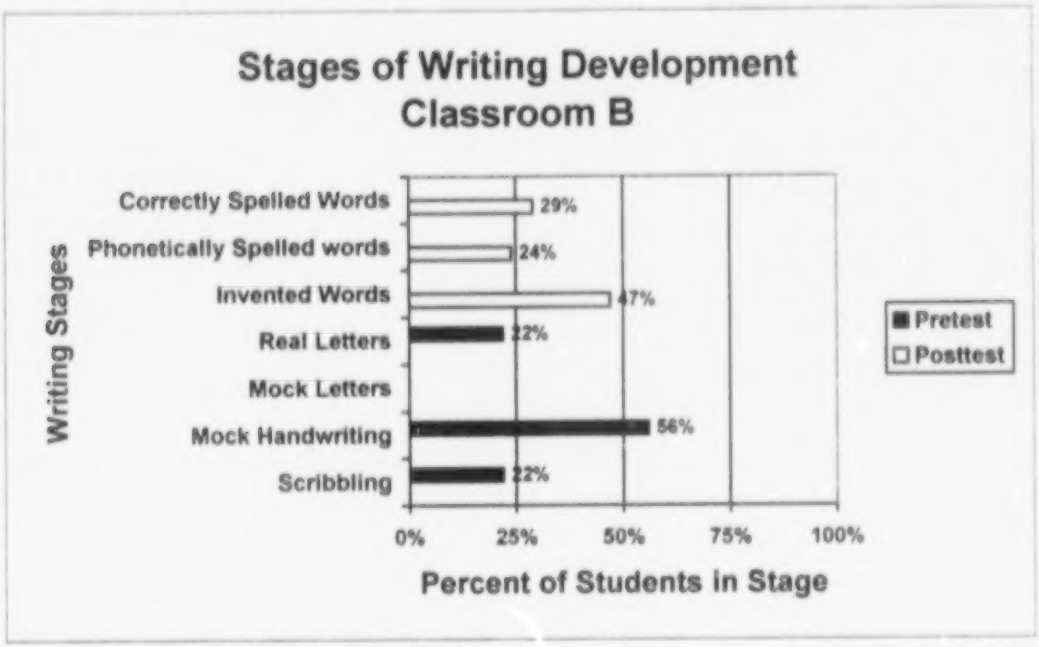


Figure 9: Pretest and posttest results for Site A Classroom B

The students all increased their writing ability. This is reflected by the growth in the developmental stages of writing checklist. Forty-seven percent of the students are in the invented word stage. In this stage, the students are comfortable writing alphabetical letters and clustering them together to invent words.

In the phonetically spelled word stage, students are writing words as they sound. Twenty-four percent of the students are in this stage. The remaining students are in the correctly spelled word stage.

Conclusions and Recommendations

Classroom B began the intervention with 18 students and finished with 17 students participating out of a classroom of 24. This is due to the high mobility rate of the school.

The BTL program is an oral language to print program that gives opportunities for the students to develop early literacy skills. It also helps the students to develop the writing process and to understand the relationship between the spoken and written word.

This is the third year the BTL program has been implemented in Classroom B. The teacher has become very comfortable and has confidence in the program. Being a veteran teacher of BTL, the concerns for this classroom are of a logistic nature. Due to the small room size, there are not many choices where to place the computers. The three computers are on one table side by side connected to one printer. It was observed that the students on the middle computer scored lower on the reading lessons. This may have been the result of too many distractions. Cardboard walls were made to form cubicles to help lessen the distractions. The ideal situation would be to have three separate stations located around the room.

There are many benefits to the program. The students love the elephant mascot. They greet the mascot upon entering the classroom and write letters to him throughout the day. In the reading corner, the students enjoy reading to him. This presents spontaneous teaching moments. There are 56 books found in three formats: big books, the take-me-home books, and the books on the computer. These provide consistent literacy exposure. The students are so familiar with the books that they can read them with confidence and make observations about the print. These observations along with the computer lessons are demonstrated in their writing development.

Overall, BTL had a positive effect on the students. The program allowed students to develop reading and writing skills both as a group and individually on the computer.

PROJECT RESULTS

Site A

Classroom C

First Grade

Historical Description of the Intervention

The project objective of this intervention was to develop the children's linguistic awareness through direct instruction of phonemic awareness for students with limited pre-reading and reading skills.

The action research for Site A Classroom C began with a phonemic awareness pretest (Appendix A) that was administered to five first grade classrooms the third week of school. From the results of the test and classroom teacher observation, students that were considered at risk with reading skills were chosen for this intervention. Approximately thirty minutes of formal group instruction of phonemic awareness was taught three days per week for sixteen weeks.

New phonemic challenges were presented in a gradual step-by-step progression; with new challenges building on those previously introduced and practiced. The following concepts were taught with different degrees of difficulty depending on progress: listening, rhyming, jingles, poetry, word to sentences, awareness of syllables, initial and final sounds, phonemes, and introducing letters and spelling. Each concept was taught through some learning game in a playful manner. Many of the games used were taken from the classroom curriculum in Phonemic Awareness in Young Children, (1999) written by Marilyn Adams, Barbara Foorman, Ingvar Lundberg, and Terri Beeler. Students' progress was assessed by informally observing responses and involvement.

Responses were switched frequently from individual to whole group. A checklist was kept for each student as another means to keep track of student progress. A posttest was administered after the sixteen weeks of intervention.

Listening games were a large part of the intervention. The goal was to sharpen children's ability to attend selectively to sounds. In the initial games, the children were asked to identify and sequence many everyday sounds, such as a bell, voices coming from the hallway, the sound of scissors cutting, and so on. After that, more challenging activities such as following oral instruction were required of them. The following order of listening activities were presented to the children: listening to sounds, listening to sequence of sounds, listening sensitively and thoughtfully, listening to sounds that are blended in the environment, listening to a particular sound and to pair it with its source, picking out one sound from many similar sounds heard at once, attending to differences between what they expect to hear and what they actually hear, overcoming distractions, pronunciation differences, and so on, while listening to language, and remembering and executing action in sequential steps.

Rhyming was used to introduce the children to the sounds of words. The idea that language has not only meaning and message, but also form was instructed through rhyming games, poetry and stories. To build the art of listening actively, attentively and analytically, children would be asked to listen to very familiar poems, and rhyming stories, except now and then, the familiar wording would be replaced with nonsense. Later in the intervention, some of these poems and stories were presented in large print or big book form. The complete list for teaching rhyming progressed as follows in the intervention: poetry, songs, and jingles enhanced awareness of sound patterns. Rhyming

books were read to teach children to use meaning and meter to notice and predict rhyming words, to rhyme through movement, to do word rhyming, to use phonological cues to generate rhymes, to quickly response without context clues, to attend to word stems, and to complete a rhyme book.

Language consists of sentences of different lengths and these sentences consist of words that also have different lengths. Here is the beginning of discovering that oral language is made up of layers of smaller and smaller linguistic units. The intervention tried to teach that sentences convey our separate thoughts, sentences are composed of separate meaningful words, and sentences must have particular words and word order in it. Activities and games were created to reinforce these ideas.

As the intervention progressed, students were brought one step further. The children discovered that some words can be divided into smaller units, as syllables. In the beginning the children are asked to clap their own names and then move on to clapping out syllables of other words. After mastery of this, synthesis, creating words from separate syllables, was taught. Care was taken to make sure that words used in these games were familiar words.

To introduce the idea of initial and final sounds, children were made aware of how the sounds are spoken in isolation and that phonemes are parts of words. This introduced the idea that every phoneme appears in lots of different words. Children were shown ways to pay attention to how the phonemes feel when they are articulated. The next step to the intervention presented comparing, contrasting, and eventually identifying the initial sound of a variety of words. The children were then shown that if the initial phoneme of a word is removed, a totally different word might result. Similar activities were taught.

After all the proceeding concepts were understood, the intervention addressed the concept that words can be divided into single sounds. To make this concept more concrete, colored blocks to represent separate sounds and index cards that were divided into lanes were used to separate sounds in a sequence. In the beginning, children were asked to analyze syllables into phonemes and synthesize syllables from phonemes. The intervention then moved on to consonant-vowel-consonant words. The phonemic structure of consonant blends was then introduced. The difficulty of consonant blends made it necessary to explicitly review and compare before moving on to inserting and removing the internal phonemes. Finally, children were asked to analyze and synthesize four-sound words.

The final intervention was teaching how to map the sounds onto letters. Letter-sound activities tried to help the children to understand the basic alphabetic principle: that the letters in a written word, left to right, represent the sequence of phonemes in a spoken word, first to last. Only letter-sound and spelling-sound patterns that support that principle were explored.

Presentation and Analysis of Results

The intervention at Site A, Classroom C started with twenty-nine students and ended with twenty-three students, due to mobility. Another child moved after the intervention was completed. At the beginning of the intervention, all these students were considered at risk by the classroom teacher and according to the pretest results. At the end of the intervention, seven students were considered at risk by the same measures. The other students had improved enough to be considered slightly below average students.

The posttesting showed an increase in all areas tested. The results are summarized in Figure 10. Classroom C students had a significant increase in all areas tested. Rhyme

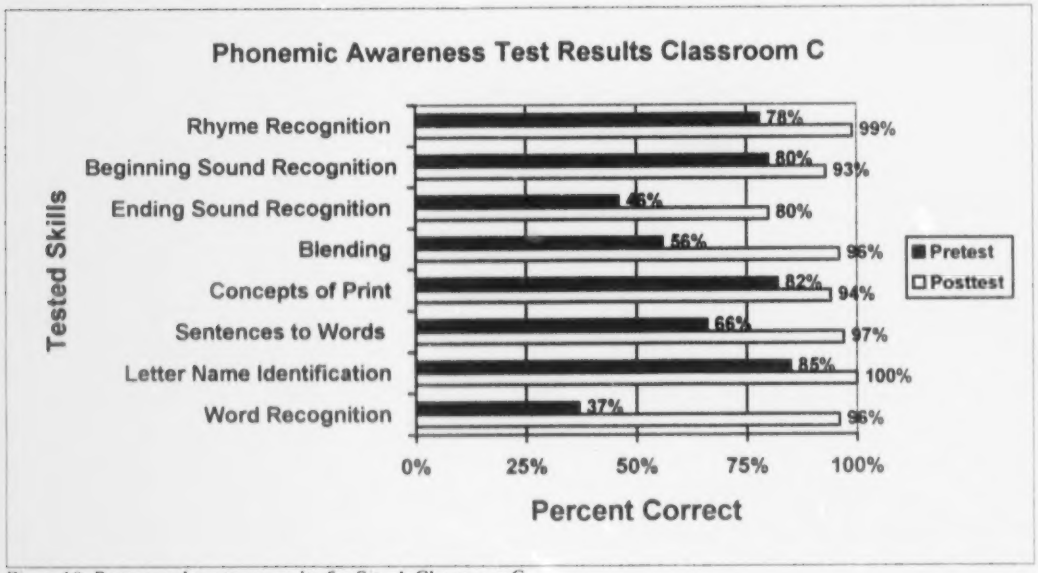


Figure10: Pretest and posttest results for Site A Classroom C

recognition increased to 99%, and letter name identification increased to100 % correctly scored. Even though students scored 93% correctly on beginning sound recognition, there is still some concern that by the middle of first grade some students still cannot hear this initial sound. The initial phonemes of words are easier to distinguish and attend to than medial or final phonemes. There is more concern for the ability to hear the ending sound since 80% was correctly scored. However, the ability to hear final sounds is relatively difficult to isolate even when pronounced with emphasis. Many people tend to omit the final sound as a matter of dialect or habit. Knowing these facts should warrant extra attention and time for working on these skills in the classroom.

It is interesting to note that students correctly scored 96% on both blending and word recognition. This indicates that students are aware that words are made of phonemes. Having this knowledge is a significant benefit to those learning to read. Five students of the 23 did not know all the concepts of print. This is definitely a red flag for these students. Of these five students, three are being considered for retention in first grade.

The students scored 97% correctly on sentence to word knowledge on the posttest. Learning how to read or write depends on knowing what is and is not a word. Research affirms that young children generally have only a vague awareness of words. In view of this, the score is a good indication this understanding has been mastered by most of the students.

A parent post survey (Appendix K) was sent home with each child and was to be returned to school. Eight surveys out of 26 surveys were returned. One was returned signed, but none of the questions was answered. The child said that his grandmother did not know how to fill it out. This survey required that a parent be knowledgeable about what their child is doing in school. According to the classroom teachers, many of the parents of the students are not actively involved in school. Nor do they view school as a priority for their child. It could be surmised that this survey went into more detail than these parents were willing to think about. For the same reason, that may be why so few surveys were returned. Seven parents said that they felt their child had made lots of gains with reading since the beginning of the school year. They mentioned gaining more confidence, improving comprehension, understanding of punctuation, increasing phonics skills, and love of reading as ways their child had improved. As writers, the parents felt that their child was becoming an emergent writer. At the beginning of the year there was very little or no real writing. Four parents did not hear their child refer to "chunking;" however, most said their child does seem to notice patterns in words and find small words in large words. With the exception of one child, it was reported they like to read outside of school. Parents feel their children do like to read. This thought comes from seeing them read and reading to siblings.

Conclusions and Recommendations

Based on the presentation and analysis of results, the targeted first grade class has shown significant improvement in all areas of phonemic awareness. This was verified through pre- and posttests, parent surveys, classroom teacher observation, and student transfer of knowledge. The activities stimulated the development of phonemic awareness for the students. The class started the intervention with poor phonemic awareness skills and ended the intervention with much higher levels of awareness. Students' conscious effort to use good listening skills was observed by teachers at the end of the intervention. Some students would not always use the learned listening skills. With teacher cues and reminders, however, they knew what they should do to focus on better listening.

This researcher feels that the action plan clearly demonstrated that time spent explicitly and systematically teaching phonemic awareness is well worth the effort. As the children began to increase their understanding of rhyme and alliteration, and outcomes of games that involve manipulation of sounds in names, songs, poetry and drama, reading skills also improved. It seems that phonemic awareness must be developed before and while a student learns to read.

The most common and fundamental characteristic of poor text reading is the inability to read single words accurately and fluently. Skill in word reading in turn depends on both phonological awareness and the development of rapid associations of speech print. This researcher has observed that the readers become more aware of the details of language structure and more attentive to internal aspects of words than before the intervention. Large numbers of children fail to learn to read with fluency, accuracy, and comprehension. Most children must be taught to read through a process in which they are

made aware of sounds and the symbols that represent them and then learn to apply these skills. The intervention of teaching phonemic awareness helped the children understand our alphabetic writing system. That is, in order to read new words written with an alphabetic system, children need to be able to map the symbols to the speech sounds that make up spoken words. A great improvement was observed in students who were having extreme difficulty with invented spelling. Phonemic awareness is primarily responsible for the development of the ability to sound words out.

Through this intervention it has been concluded that phonemic awareness is definitely not naturally learned. It must be explicitly taught. If this is taught in a playful manner, it is well received by students. Time must be spent to formulate these phonemic awareness skills. Awareness increases by formally teaching with a progressive process. The reading experience is in no way spoiled because this intervention has observed all children desiring to participate in activities. The most important teaching tool is to remember is to keep it playful.

It is the recommendation from this research and intervention that the importance of explicitly teaching phonemic awareness needs to be brought to the attention of more educators both experienced and non-experienced. Of course, phonemic awareness alone is not sufficient for addressing the needs of teaching reading, but it plays a very important role in forming a good strong base for learning to read and preventing reading failure. A sequence and daily program of direct instruction of phonemic awareness should be given high priority. The activities should be plentiful, frequent, and fun.

PROJECT RESULTS

Site B

Classroom D

Fourth Grade

Historical Description of the Intervention

The objective of this project was to improve reading abilities as a result of increased instructional emphasis on reading skills. Appropriate teaching strategies such as multiple intelligences were utilized. The action plan began with surveys of the students (Appendix F) and their parents (Appendix G). Questions were asked regarding how much they like to read, how much time is spent reading, and how often they visit a library. Other items such as the availability of reading materials and discussion about the meaning of the story were surveyed. These surveys were used to assess the amount of reading done by students and the emphasis placed on reading by the parents. All of the surveys were completed and returned by the students along with the parents' surveys. Participating in the action research was seen as a priority with 100% completion of these surveys.

Pretests and posttests of reading skill assessments (Appendix H) were administered at the beginning and end of the 16-week intervention. The Signatures End-of-Selection Tests are an ongoing assessment tool used throughout the year. These Signatures Tests were designed to measure students' reading comprehension. They consist of literal-level questions to assess recognition and recall selection content and key vocabulary words.

The intervention included the use of lessons addressing multiple intelligences to improve reading skills. Multiple intelligences were the focus of special weekly activities

throughout the 16- week intervention. However, Sustained Silent Reading (SSR) was an activity implemented daily. The students read for 30 minutes each day. This independent reading time is a part of the Verbal/Linguistic Intelligence. Story time is also a part of this same intelligence. In story time, students read all types of literature. The students read from textbooks, library books, magazines, newspapers, or poetry. This time was also used for our class to read aloud together. Musical/Rhythmic Intelligence was addressed by using musical jingles to memorize parts of speech and their application in reading. Venn diagrams were utilized to compare characters in stories or address the similarities and differences between novels or chapter books. Diagrams and matrices targeted Logical/Mathematical Intelligence. In a lesson, vocabulary terms were used in sentences including an illustration of this word. Key words were discussed, and the picture was also described. Five-finger book reports were also an activity for the students. Each finger represents an element: character, setting, plot, ending, and favorite part. These oral reports were given using the tips of their fingers as a guide. Stories on a string were made with index cards and yarn. Different sections of a story were visualized then illustrated by students. Then, the picture cards were put in order of the story and attached to the yarn. Key words, five-finger reports, and stories on a string addressed the Visual/Spatial Intelligence.

Bodily/Kinesthetic Intelligence was met in the activity called "Act It Out." The students were divided into teams and acted out a scene from the story being read by the class. The classroom has a comfortable environment. A variety of green plants thrive throughout the classroom. We also take books with us outside onto the school's front lawn for Story Time or SSR. This promotes the Naturalist Intelligence. Journaling

continues to encourage Intrapersonal Intelligence. Students respond to prompts or questions for reflection. The classroom is set up in groups of four. Each table has four desks with four students. These groups frequently work as teams. These common activities encourage the Interpersonal Intelligence.

Presentation and Analysis of Results

The intervention appears to have had a positive effect on the students. Reading test scores rose illustrating improved skills of the students. Therefore, their reading ability has been enriched as well. A summary for Classroom D is in Figure 11.

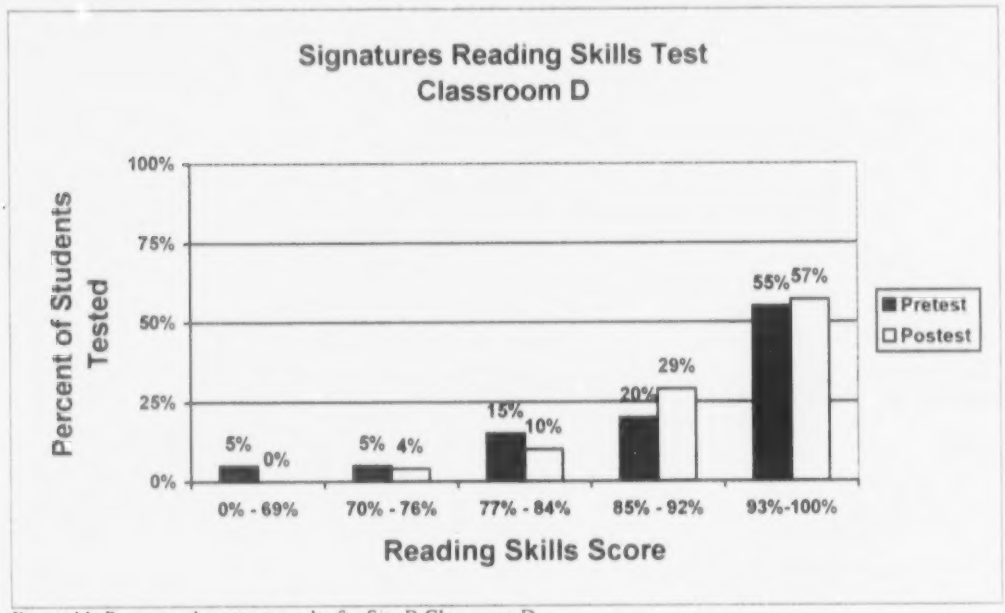


Figure 11: Pretest and posttest results for Site B Classroom D

A method used in assessing the effects of the intervention was Signatures Reading Skills Test. This test was given at the start of the action plan as well as at the end. It was used to compare scores for the assessment of the students' reading skills. This Signatures Test was given to the class of twenty students originally. Since the fall, the class size has increased by one student. Twenty-one students took the posttest. The reading test given at

the end of the intervention showed 57% of the students scored between 93-100%. Results also exhibit 29% of the class scored between 85-92%. Of the twenty-one students participating, two or 10% had scored between 77-84%. One student, or 4%, scored between 70-76%. There were no scores in the lowest percentage group of 0-69%. Overall, these posttest scores illustrate that 86% of the class scored between 85-100%. Those scores represent the equivalent of a B or an A letter grade. The large majority of the students performed well or very well following the intervention.

The original pretest scores are lower in each of the percent sections. Prior to any intervention 55% of the students scored between 93-100%. Only 20% showed scores between 85-92%. The middle scores of 77-84% were received by 15% of the participants. Last, 10% of the students scored in each of the two lowest groups, 5% scored between 70-76% and 5% scored at 0-69%. Overall, the pretest scores illustrate 35% of the students scored between 0-84%, which is the equivalent to a C letter grade or lower. That letter grade is described as average, so more then one-third of the class performed at an average level or worse. Applying the multiple intelligence teaching strategies reached out in many facets to the children involved. The largest benefit was an increase made in reading in general. Students learned through multiple intelligence activities that reading is much more than just reading through a textbook. The variety of lessons and projects that were connected to reading broadened their horizons for reading. Building a passion and interest in reading was the most important part of this research project. This will have the greatest long-term effect on these students. Hopefully, now they have become life-long readers!

Conclusions and Recommendations

The multiple intelligences theory developed by Dr. Howard Gardner did not change what was taught in language arts. It changed how it was taught. Students focusing only on their use of verbal-linguistic intelligence to learn reading, writing, and speaking skills is common. This is fine for those children who have a natural verbal-linguistic strength. However, it failed for those who needed to draw on other strengths to master the world of language acquisition. To reach all students, a range of activities and strategies that nurture each intelligence was incorporated. After all, students have a combination of intelligences and are capable of growth in each area. This approach motivated students and provided variation in how reading lessons were presented. By incorporating multiple intelligence theory in lessons, improvements can be made in students' skills across the curriculum. Although the focus was on reading, all areas were affected. Approaching learning in this manner allowed a wider range of students to successfully participate in classroom learning. Using this intervention is recommended due to its positive influences on the students and their learning. Preparing multiple intelligence-based lesson plans can be more time consuming than standard lesson plans; however, the extra effort and time is worthwhile. With limited time, the number of multiple intelligence lessons can be adjusted to individual schedules. One lesson per day or one per week may be an option. Beginning slowly is helpful, gradually increasing the amount of multiple intelligence activities in the classroom. Students' creative ideas can also help with producing different lessons. Make students into teachers and have the teacher learn just as the students do. Keeping everyone involved is essential; therefore utilize multiple intelligence strategies for all.

Reference Cited

Adams, M.J. (1990). Beginning to read: Thinking and learning about print. Cambridge, MA: MIT Press.

Adams, M.J., Foorman, B.R., Lundberg, I., Beeler,T. (1999). Phonemic Awareness in Young Children . Baltimore, MD: Paul H. Brookes Publishing Co.

Ball, E.W., & Blachman, B.A. (1991). Does phoneme segmentation training in kindergarten make a difference in early word recognition and developmental spelling? Reading Research Quarterly, 26, 49-66.

Blachman, B.A., Ball, E.W., Black, R.S., & Tangel, D.M. (1994). Kindergarten teachers develop phoneme awareness in low-income, inner-city classrooms: Does it make a difference? Reading and Writing, 6 1-18.

Broderick, Patricia and Allen, Raymond. (2000). Teaching Pre K-8 30 (6), Norwalk.

Brualdi, Amy (1998). Gardner's theory. Teacher Librarian 26 (2), 26-28.

Byrne, B.A., & Fielding-Barnsley, R. (1995) Evaluation of a program to teach phonemic awareness to young children: A 2- and 3- year follow up and a new preschool trial. Journal of Educational Psychology, 87, 488-503.

Coffman, Diane M. (1999). Every child is smart. Mailbox Teacher 27 (4), 17-22.

Cunningham, A.E. (1990). Explicit versus implicit instruction in phonemic awareness. Journal of Experimental Child Psychology, 50, 429-444.

Educational Research Network I. (1997-1998) Prognosis for Poor Readers and What We Can Do for Them. [On-line]. Available: ern@ernweb.com

Ehri, L.C. (in press). Graphem-phoneme knowledge is essential for learning to read words in English. In J. Metsala & L. Ehri (Eds.). Word recognition in beginning reading. Hillsdale, NJ: Lawrence Erlbaum Associates.

Foorman, B.R., Francis, D.J., Beeler, T., Winikates, D., & Fletcher, J.M. (1997). Early intervention for children with reading problems: Study designs and pre-liminary findings. Learning Disabilities: A Multidiscinplinary Journal, 8, 63-71.

Foorman, B.R., Francis, D.J., Shaywitz, S.E., Shaywitz, B.A., & Fletcher, J.M. (1997). The case for early reading interventions. In B. Blachman (Ed.), Foundations of reading acquisition and dyslexcia: Implications for early intervention (pp. 243-264). Mahwah, NJ: Lawrence Erlbaum Associates.

Langenberg, D., Correro, G., Ferguson, G., Kamil, M., Samuels, S.J., Shaywitz, S.,Williams, J., Yatvin, J., Ehri, L., Garza, N., Marrett, C., Shanahan, T., Trabasso, T., Willows, D. (1998, November) Teaching children To Read: An Evidence-Based Assessment of the Scientific Research Literature On Reading and Its Implications for Reading Instruction (National Reading Panel).

Manzo, Kathleen. (2000) Reading Association Presents Children's Literacy Rights Education Week.

Nelson, Kristen Nicholson. (1998). Literacy activities that tap kids' multiple intelligences. Instructor 107 (5), 65.

NRRF- A Synthesis of Research on Reading from the NICHD http://www.nrrf.org/synthesis__research. htm#treatment

Read with me. (1997, Sept.) Making Connections: How Children Learn [on-line]. Available: http://www.ed.gov/pubs/readwithme/makconn.num

Reading: The First Chapter in Education [on-line]. Available: http://www.cec.sped.org/ericec/frstchap.num

Signatures Skills Assessment: Reading and Language Arts (1999). Orlando: Harcourt Brace School Publishers.

Snow, C. E., Burns, S. M., & Griffin, P. (Eds.). (1998). Preventing Reading Difficulties in young children. Washington, DC: National Academy Press.

Stanovich, Keith E. (1993-94). "Romance and Reality (Distinguished Educator Series). "Reading Teacher,47(4), 280-91. EJ 477302.

Stanovich K.E. Cunningham, A.E.,& Cramer, B.B. (1984). Assessing phonological awareness in kindergarten children: Issues of task comparability, Journal of Experimental Child Psychology, 38, 175190.

Teaching Reading: A Balanced, Comprehensive Approach to Teaching Reading in Prekindergarten Through Grade Three. http://goldmine.cde.ca.gov/cilbranch/teachrd.htm

Wagner, R.K. Torgesen, JX. Rashotte, C.A., Hecht, S.A., Barker, T.A., Burgess, S.R., Donahue, J., & Garon, T. (1997). Changing casual relations between phonological processing abilities and word-level reading as children develop from beginning to fluent readers: A five-year longitudinal study. Developmental Psychology, 33, 468479.

Wright Group Publishing Inc. (1999). Breakthrough to Literacy, Version 4.1 Student Connections [computer software] Bothel, WA.

Appendices

Appendix A
Phonemic Awareness Pretest/Posttest

X=knows O=doesn't

Rhyme Recognition: When words rhyme, they sound the same at the end. For example, fun, run, and sun rhyme.

I will say two words. Tell me if these words rhyme:

1. cat/hat
2. book/chair
3. rock/sock
4. clown/brown
5. bike/ball

Now tell me a word that rhymes with_____:
(nonsense words are acceptable)

6. hop
7. goat
8. man

Beginning sound Recognition: Words can begin with the same sound. Listen to these words: boy, ball, and balloon. They all begin with same sound /b/.

Do these words begin with same sound?

1. sink/seal
2. pie/tree
3. more/road
4. vase/valentine

Which word begins with the same sound as_____?

5. lion luck or book
6. fountain funny or crayon
7. chicken thunder or chocolate
8. balloon crying or bunny

Ending Sounds Recognition: Words can end with the same sound. Listen to these words: farm, him and gum. They all end with the same sound /m/.

Do these words end with the same sound?

1. fan/run
2. made/bat
3. top/tore
4. job/cab

Which word ends with the same sound as _____?

5. grass - mice or tape
6. fit mop or late
7. sack bag or like
8. tell ball or song

Blending: If I say /p/ ink--I make the word pink.
If I say /d/ ear—I make the word dear.

What word do I make if I say_____?

1. /t/ able
2. /f/ all
3. /g/ old
4. /m/ other

If I say /m/ ea/ t—I make the word meat.

5. /m/ a/ n
6. /b/ u/ g
7. /c/ a/ t
8. /f/i/sh

**Concepts of Print*:

1. Show me which of these is a number.

2. Show me which of these is a shape.

3. Show me which of these is a letter standing all by itself-just one letter by itself.

4. Show me which of these is a word standing all by itself-just one word by itself.

5. Show me which of these are sentences.

6. (*Pointing to the sentences*) If I were reading these sentences, show me where I would start reading them.

7-8. Show me by pointing with your finger, which way I would go if I were reading these sentences.

(7) *(left to right)*

(8) *(return sweep)*

**Letter Naming*: I'd like you to tell me the names of these letters. What letter is this?
(Note: You may point to the letter or use index cards or an index card with a "window" cut in it to show one letter at a time. Move left to right across the rows of letters.)

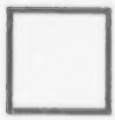
**Word Recognition List*: Try to read these words for me. What is this word? (Move down the column of words.)

**Sentences-to-Words*: I am going to say a sentence to you. I am going to move a block for each word I say. "Father works hard."

(Teacher repeats each word as she moves each block. Have the child replicate same sentence and movements.)
Now repeat these sentences and move one block for each word.

1. Mother called.
2. Go home, John.
3. Will you help me?
4. When does the bus leave?
5. Dad and Mom went to the store.

Cat



7

The girl found a ball. It was a big, red ball. She picked up the ball and bounced it.

B

Letter Name Identification

I ____

V ____

Z ____

G ____

X ____

N ____

Q ____

W ____

U ____

f ____

a ____

t ____

p ____

g ____

b ____

Word Recognition

the ____

red ____

and ____

to ____

in ____

you ____

for ____

it ____

is ____

dog ____

bat ____

ten ____

pig ____

hop ____

mud ____

Student Name _____ School _____ Date _____

Rhyme Recognition

1. cat/hat ____
2. book/chair ____
3. rock/sock ____
4. clown/brown ____
5. bike/ball ____
6. hop ____ ____
7. goat ____ ____
8. man ____ ____

Ending Sound Recognition

1. fan/run ____
2. made/bat ____
3. top/tore ____
4. job/cab ____
5. grass: mice/tape ____
6. fit: mop/late ____
7. sack: bag/like ____
8. tell: ball/song ____

Beginning Sound Recognition

1. sink/seal ____
2. pie/tree ____
3. more/road ____
4. vase/valentine ____
5. lion: lucky/book ____
6. fountain: funny/crayon ____
7. chicken: thunder/chocolate ____
8. balloon: crying/bunny ____

Blending

1. /l/ able ____
2. /l/ all ____
3. /g/ old ____
4. /m/ other ____
5. /m/a/n ____
6. /b/u/g ____
7. /c/a/t ____
8. /f/i/sh ____

Concepts of Print

1. number ____
2. shape ____
3. letter ____
4. word ____
5. sentences ____
6. where to start reading ____
7. left to right ____
8. return sweep ____

Sentences to Words

1. Mother called. ____
2. Go home, John. ____
3. Will you help me? ____
4. When does the bus leave? ____
5. Dad and Mom went to the store. ____

Letter Name Identification

1. I ____
2. V ____
3. Z ____
4. G ____
5. X ____
6. N ____
7. Q ____
8. W ____
9. U ____
10. f ____
11. q ____
12. t ____
13. p ____
14. g ____
15. b ____

Word Recognition

1. the ____
2. red ____
3. and ____
4. to ____
5. in ____
6. you ____
7. for ____
8. it ____
9. is ____
10. dog ____
11. bat ____
12. ten ____
13. pig ____
14. hop ____
15. mud ____

Phonemic Awareness Test Results

School:

Teacher:

Directions: For each student for whom both pretest and posttest data are available, record the number of **correct** items under the appropriate subtest. Use one line for each student and give both pretest and posttest results. Do not write student names on this report.

Students	Rhyme Recognition	Beginning Sound Recognition	Ending Sound Recognition	Blending	Concepts of Print	Sentences to Words	Letter Name Identification	Word Recognition
	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
Totals								

Appendix B
Stages of Writing Development
Class Dated Check List

Student's Name	Scribbling	Mock Handwriting	Mock Letters	Real Letters	Invented Words	Phonetically Spelled Words	Correctly Spelled Words
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							
21.							
22.							
23.							
24.							

Appendix C

Literacy Development
Parent Survey

Name: _____ Date: _____

1. How much time do you spend reading to your child each day?

   a) never b) 5 min. c) 10 min. d) 15 min. or more

2. Are books available to your child?

   a) yes b) no

3. When you read, do you talk to your child about the story and the pictures?

   a) yes b) no

4. Does your child look at the pictures and tell a story?

   a) yes b) no

5. Are writing materials available to your child?

   a) yes b) no

6. Does your child pretend to write?

   a) yes b) no

7. Did your child attend preschool?

   a) yes b) no

Appendix D

Parent Pre-Survey

Student's name_____ Date_____

Survey filled out by_____

1. Did your child attend pre-school?
   a)Yes b)No

2. Do you teach your child songs and rhymes?
   a)Yes b)No

3. How much time do you spend reading to your child each day?
   Never 5minutes 10minutes 15minutes or more

4. Do you hear your child sing songs or recite rhymes while at play?
   a)Yes b)No

5. Does your child sit close to you and look at the book as you read to him/her?
   a)Yes b)No

6. How often do you read for pleasure? (As a book, magazine, newspaper)
   a)Never b)Occasionally c)Daily

7. Can your child follow two step directions easily?
   a)Yes b)No

8. Are books available to your child at home?
   a)Yes b)No

Thank you!!!!

Appendix E
Student Survey

1. Did you attend pre-school?
2. Do you read books at home?
3. Does someone read to you daily?
4. Have you heard the rhyme "Itsy Bitsy Spider"?
5. Do you own a book or books at home?

Students were asked each question orally.

Appendix F

PARENT SURVEY

As a part of this reading intervention in your child's classroom, I would like to ask you a few questions about reading at home. Please complete the following survey and return it to school. Thank you!

Miss O'Donnell

1. How much time do you spend reading to your child each day?

a) none b) 5-10 minutes c) 10-15 minutes d) 15 minutes or more

2. Do you talk to your child about the story and its meaning?

a) yes b) no

3. How often do you take your child to the library?

a) never b) once a year c) once a month d)once a week

4. Are there reading materials (books, magazines, newspapers) available to your child at home?

a) yes b) no

5. If yes, put the materials in order starting with the item read most often to the item read the least often.

MOST a)

b)

LEAST c)

6. How often does your child read daily on their own at home?

a) never b) 5-10 minutes c) 10-15 minutes d) 15 minutes or more

Appendix G

STUDENT SURVEY

As a part of this reading intervention in our classroom, I would like to ask you a few questions about your reading habits. Please complete the following survey and return it to school. Thank you!

Miss O'Donnell

1. Do you like to read?
   a) yes b) no

2. How often daily do you read on your own?
   a) never b) 5-10 min. c) 10-15 min. d) 15 min. or more

3. What types of books do you enjoy the most?
   a)
   b)
   c)

4) How often do you go to the library?
   a) never b) once a year c) once a month d) once a week

5) What is your favorite part about reading?

6) What is an aspect you dislike about reading?

7) Reading is important because...

Appendix H
Signatures Skills Assessment

Name _____ Skills Assessment

VOCABULARY: Key Words

Directions: Read each sentence. Fill in the answer circle in front of the word that best completes each sentence.

1. We could hear the _____ of the horses.

   Ⓐ whinnies Ⓑ manes
   Ⓒ mountains Ⓓ giggles

2. The sheep grazed in the _____.

   Ⓐ factory Ⓑ meadow
   Ⓒ data Ⓓ neighbor

3. He rents a room in that _____.

   Ⓐ orchestra Ⓑ diplomat
   Ⓒ boardinghouse Ⓓ agency

4. The horseback rider kept his feet in the _____.

   Ⓐ sways Ⓑ stirrups
   Ⓒ hooves Ⓓ puddles

5. My teacher was _____ with my work, and I got a good grade.

   Ⓐ jealous Ⓑ proper
   Ⓒ imagined Ⓓ satisfied

Hare Finds • Skills Assessment • Harcourt Brace School Publishers

VOCABULARY: Key Words (continued)

6. We saw a horse _____ across the field.

Ⓐ purr Ⓑ propel
Ⓒ gallop Ⓓ swim

7. Dan made eggs in a large _____ .

Ⓐ skillet Ⓑ match
Ⓒ surprise Ⓓ delegate

8. The great actress trained a young _____ to take her place.

Ⓐ protégée Ⓑ military
Ⓒ gait Ⓓ program

9. At first my father said "No," but now he is _____ .

Ⓐ copying Ⓑ wavering
Ⓒ creating Ⓓ heating

10. She was so involved with her book that it seemed like she was in a _____ .

Ⓐ weave Ⓑ incident
Ⓒ victory Ⓓ trance

11. We watched the _____ perform at the circus.

Ⓐ traders Ⓑ acrobats
Ⓒ librarians Ⓓ instructors

Rare Finds • Skills Assessment • Harcourt Brace School Publishers

VOCABULARY: Key Words (continued)

12. I am _____ to try something so dangerous.

Ⓐ sufficient Ⓑ responsible
Ⓒ wondering Ⓓ reluctant

13. After studying for hours, Paul walked _____ into class.

Ⓐ confidently Ⓑ delicately
Ⓒ prompt Ⓓ frilly

14. We have forks, spoons, and other _____ .

Ⓐ figures Ⓑ standards
Ⓒ utensils Ⓓ cloths

15. I saw a cowboy ride a bull at the _____ .

Ⓐ announcement Ⓑ rodeo
Ⓒ station Ⓓ radiator

16. The famous singer sent her _____ to pick up her contract.

Ⓐ agent Ⓑ boxer
Ⓒ neighbor Ⓓ spirit

Rare Finds • Skills Assessment • Harcourt Brace School Publishers

Name_____ **Skills Assessment**

COMPREHENSION: Make Predictions/Draw Conclusions

Directions: Read each passage. Fill in the answer circle in front of the correct answer for each question.

Colin's teacher told the students to research and write about their most famous relatives. Colin's mother told him that he had a cousin named Phil who was an inventor. Colin called some of his aunts, uncles, and other relatives who knew Phil so he could learn more about the famous inventor in the family. Then Colin went to the library to do more research. He was thrilled when he found a book and two magazine articles about his cousin.

17. Under which topic did Colin look in the library?

Ⓐ Relatives Ⓑ Cousins
Ⓒ Inventors Ⓓ Phil

18. What will Colin do with the book and articles he found?

Ⓐ Find information for a report
Ⓑ Copy pictures for a poster
Ⓒ Memorize them for a speech
Ⓓ Proofread them for mistakes

19. Colin is probably _____ that Phil is his cousin.

Ⓐ sad Ⓑ proud
Ⓒ ashamed Ⓓ upset

20. What will Colin probably do after he finishes his research?

Ⓐ Watch a movie
Ⓑ Choose a new topic
Ⓒ Read about other inventors
Ⓓ Write about his cousin

Rare Finds • Skills Assessment • Harcourt Brace School Publishers

Name_____ **Skills Assessment**

COMPREHENSION: Make Predictions/Draw Conclusions (continued)

Our dog Rose did not smell like a rose. "It's time the dog had a bath," my grandmother said. Then she sniffed and said, "In fact, it's way past time!"

We all tried to look busy. None of us wanted to go through the trouble of trying to keep Rose in the tub long enough to soap her up and rinse her clean.

"Come on, everyone," Grandma said. "It will take all of us to get this job done."

21. What will Rose try to do?

Ⓐ jump out of the tub Ⓑ chew the furniture
Ⓒ chase rabbits Ⓓ look for a bone

22. Whom was the grandmother speaking to?

Ⓐ all her neighbors Ⓑ the people she works with
Ⓒ everyone in the family Ⓓ her pets

23. After the job is finished, Rose will be _____ .

Ⓐ tired and hungry Ⓑ clean and damp
Ⓒ rich and famous Ⓓ dirty and smelly

24. How does the person telling the story know the job will be a lot of trouble?

Ⓐ The storyteller has probably done it before.
Ⓑ The storyteller is making a lucky guess.
Ⓒ The storyteller works for a vet.
Ⓓ The storyteller read a book about it.

Rare Finds • Skills Assessment • Harcourt Brace School Publishers

Appendix I
Consent Form

Saint Xavier University
Consent to Participate in a Research Study

Improving Pre-reading and Reading Skills

September 18, 2000

Dear Parents,

This is a very exciting year for me. I am enrolled in a master's program with several other teachers. As part of this program we are conducting a study on improving reading skills in young children. Learning to read is the most important skill your child needs. I will collect work that your child completes in class. The information that we gather will be used to improve our teaching which will enhance the quality of your child's education.

I would like your child to participate in this study. Your child's participation is voluntary and will not affect their grade. You may choose to have your child not participate. All information that I gather on your child will be kept confidential.

This is a wonderful opportunity for me, and I would appreciate your cooperation. Please sign this and return it to me as soon as possible.

Thank you,

Signed Consent

I acknowledge that my child's teacher has explained to me about the research project. I freely and voluntarily agree to let my child participate.

Child's Name: _____ Date: _____

Parent Signature: _____

☐ Check the box if you would like a copy of this release form.

☐ Check the box if do not want your child to participate.

Appendix J
Book List

Week	Title	Author	Illustrator
2	*Mouse*	Joy Cowley	Sherryl Jordan
3	*The Tree House*	Joy Cowley	Deirdre Gardiner
4	*In The Mirror*	Joy Cowley	Deirdre Gardiner
5	*Colors 1-2-3*	Karen Wheaton	Dan Griffith
6	*The Pumpkin*	Joy Cowley	Robyn Kahukiwa
7	*Dan, the Flying Man*	Joy Cowley	Annie Dickeson
8	*Shapes in My World*	Claudette Mitchell, Gracie Porter, Patricia Cousin	James R. Threalkill
9	*Going to the Park with Granddaddy*	Patricia Cousin, Claudette Mitchell, Gracie Porter	Michael McBride
10	*Buster*	Rebel Williams	Iris Nichols
11	*Moccasins*	Miriam Frost	Yoshi Miyake
12	*The Gift*	Mary Ann Peters	Judy Waterman
13	*Wood*	Rebel Williams	Celeste Henriquez
14	*Hello*	Joy Cowley	Joanne Cunningham
15	*What's Black and White and Moos?*	Rebel Williams	Bret Meredith
16	*Jump Rope*	Karen Wheaton	Dan Griffith

Appendix K
Parent Post Survey

Student's name_____ Date_____

Survey filled out by_____

Please use the back of this paper if you need more space.

What progress have you noticed in your child's **reading** since the beginning of the school year? What can your child do **as a reader** that he/she could not do before? Please give specific examples if you can.

What does your child do now **as a writer** that he/she could not do before the school year began? Again, please try to give examples.

Does your child talk about using "chunks" when he/she reads and/or writes? Can you give an example? (Chunks are rhyming patterns in words, such as "ike" in bike and "ing" in sing.)

Does your child like to read and write? How do you know?

Does your child read and/or write outside of school?

What are **your** feelings about our classroom reading and writing program?

Do you notice anything else about your child's reading and writing? Anything else you would like to add?